

Arab Encyclopedia House

P. O. BOX: 13-5348, BEIRUT-LEBANON
TEL: 343828-352598-353194, TELEX: 23107
CABLE: DIRECTNAD, ARATRD LE

MEDICINAL PLANTS IN LIBYA



FAWZY TAHA KOTB HUSSEIN

B. SC. Agr. ,B .SC. Pharm ., Dipl. Educ. Psyc.
M. Sc. and Ph. D.Pharm.
Prof. and head of Pharmacognosy Dept.
Faculty of Pharmacy
AL -Fateh University
TRIPOLI -LIBYA

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(84) CHENOPODIUM ALBUM LINN .

CHENOPODIACEAE

English Name : Common goose- foot, Pigweed.

Local Name : عفينه ، بوزنزور ، بوجنزور ، ركب الجمل

Description : An annual weed about 30- 90 cm high, with irregular or generally triangular leaves 10 cm long. Lower leaves are toothed but the upper are often untoothed. Flowers are in spikes at the end of the stem. The smooth seeds are enclosed by sepals. The herb has a bad odour. It is scattered as a weed in the cultivated areas and gardens.

Part Used : Volatile oil obtained from the flowering tops and fruits.

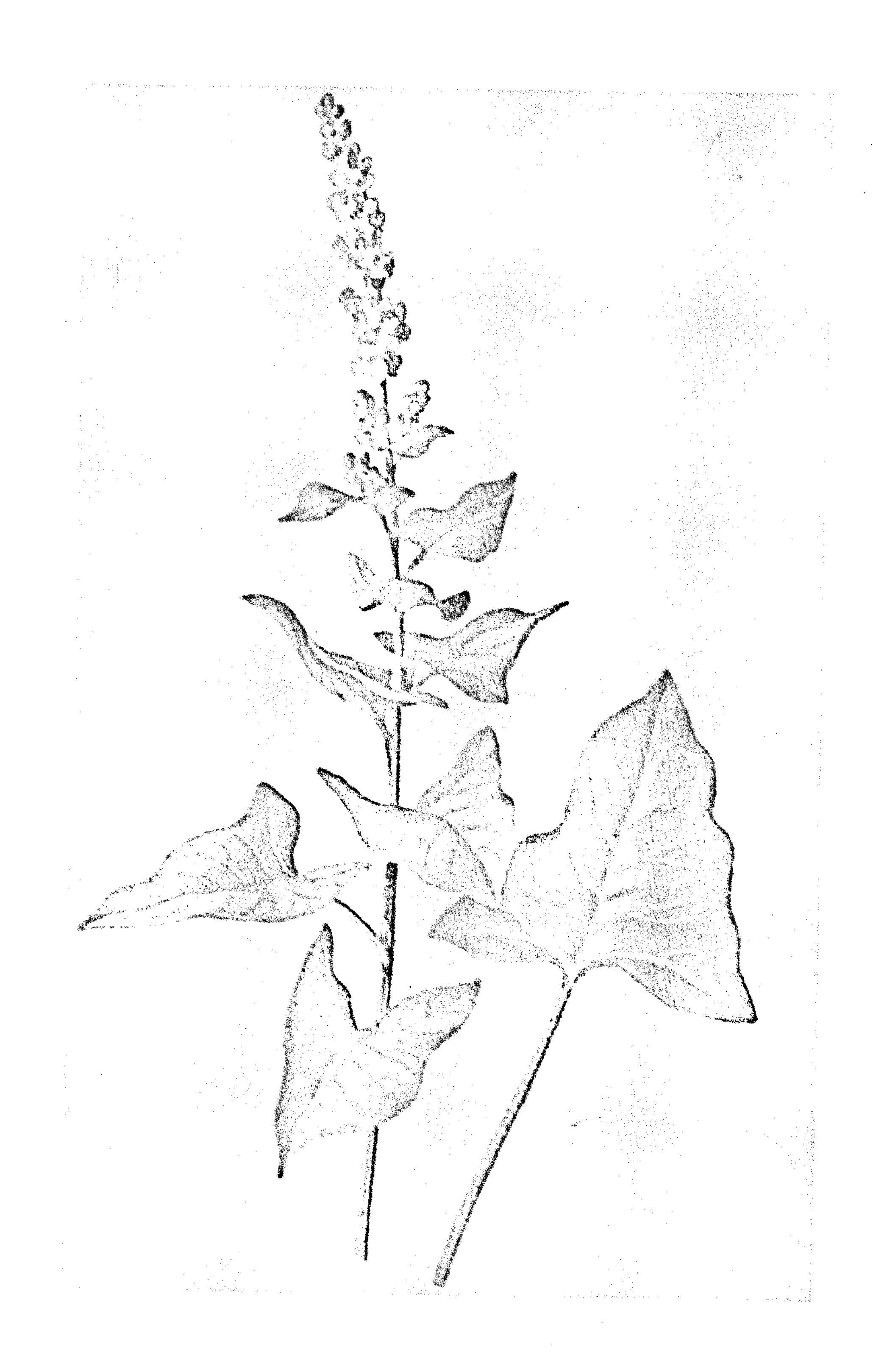
Principle constituents : The plant contains volatile oil, substance similar to cholesterol, amines, proteins and fats. It contains carotene, vitamin C and the alkaloid chenopodine.

The volatile oil contains small traces of ascaridole.

Uses : oil is anthelmintic , laxative and diuretic .

In some countries the plant **is edible** used as vegetable like spinach.

References : 1, 2, 3, 10, 12, 16, 20, 21, 22.



(85) CHENOPODIUM AMBROSIOIDES LINN.
var. anthelmenticum
CHENOPODIACEAE

English Name : Nettle- leaved goose - foot, American worm- seed, Mexican tea.

Local Name : عفين ، منتنه ، زربيح

Description : A common roadside weed. Stem erect or decumbent. Leaves alternate, coarsely dentate or wavy- margined. Flower small greenish.

Part Used : Volatile oil obtained from the flowering tops and fruits.

Principle constituents : Volatile oil containing ascaridole which is unsatuarated terpene peroxide, glycol anhydride, and saponin.

Uses : The volatile oil is anthelmintic against round worms, hook worms (ancylostomiasis) and intestinal ameba. It is used as enema for intestinal ulceration. The dose is close to the minimum toxic level. Externally it is antifungal, used in athlet's foot and in eczema . Ascaridole is obtained from the oil and used commercially as anthelmintic. Toxicity appears as hyperemia, convulsions, cardiac and respiratory abnormalities then death.

References : 1, 2, 3, 4, 10, 12, 21, 22, 25, 26, 38, 54.



(86) CHRYSANTHEMUM PARTHENIUM BERNH.
COMPOSITAE

English Name : Feverfew.

Local Name : شجرة مريم ، كركاس ، منبات ، اقحوان ، كريزاثم

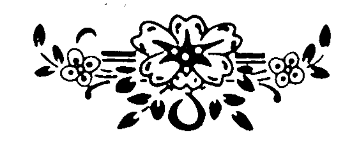
Description : A perennial plant about 14- 15 cm high. Leaves bipinnate, greenish - yellow having a strong odour. Flower - heads in a loose terminal corymb, disc florets yellow, marginal ray florets short and broad. The plant occurs in Benghazi and Marj.

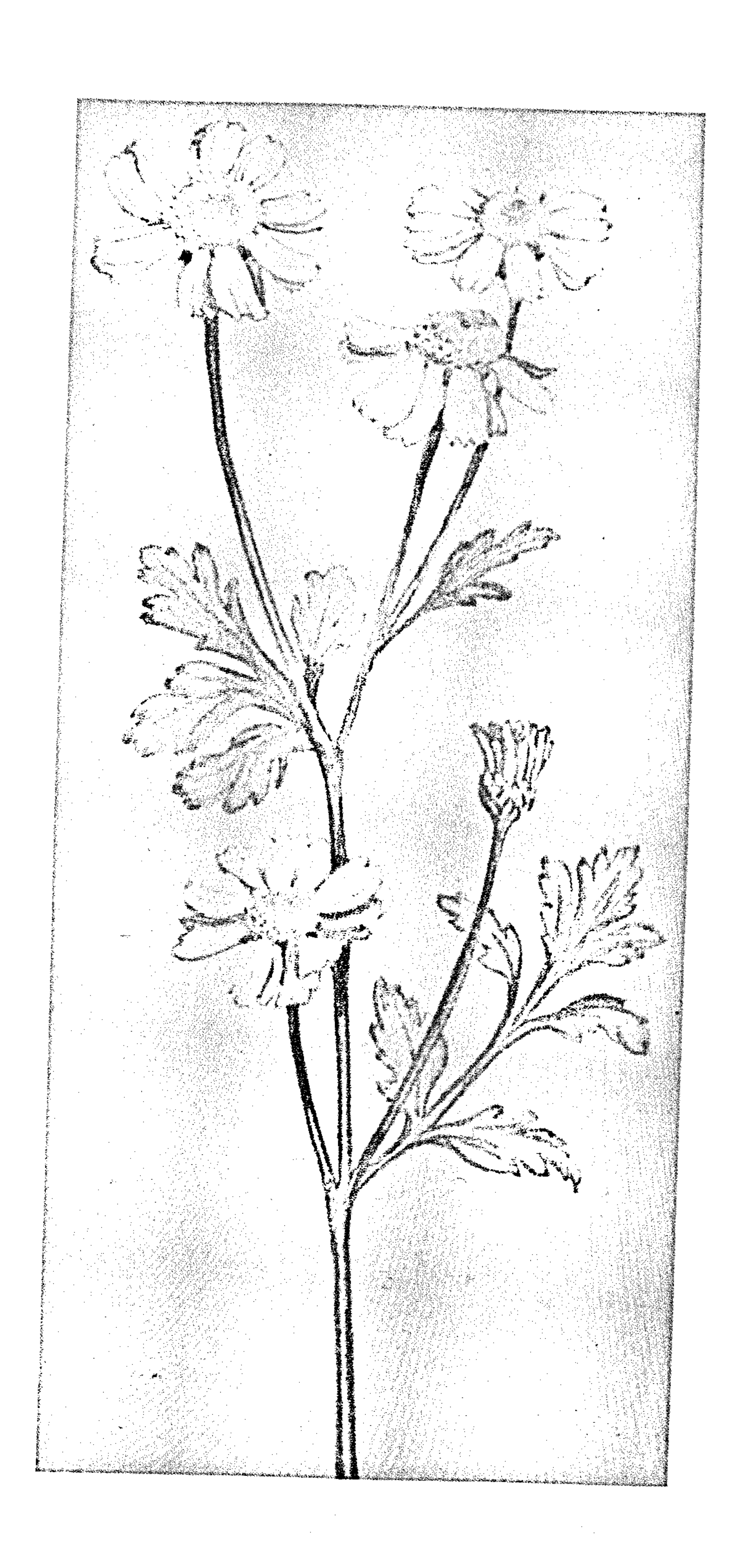
Part Used : The flower heads.

Principle constituents : The plant contains volatile oil containing camphor, terpene, borneol and esters. It contains also bitter principle.

Uses : The flower heads produce abortion, and promote menstruation. They are used as insecticide and revulsant.

References : 1, 3, 22, 40, 50, 57.





(87) CICER ARIETINUM LINN.
LEGUMINOSAE

English Name : Chick - pea.

Local Name : حمص ، جلبانا

Description : An annual cultivated herb generally glandular - pubescent. Leaves odd- pinnate, leaflets 3 - 8 pairs, oblong serrate. Flowers bluish to white, turn yellow when dry.

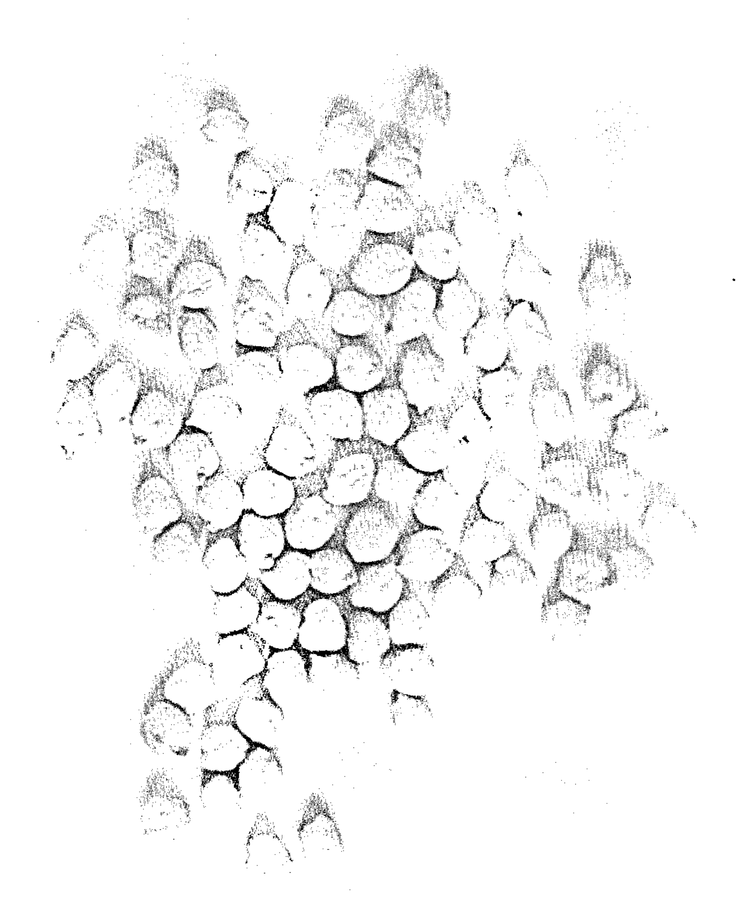
Part Used : Seeds and leaves.

Principle constituents : Fixed oil, allantoin and starch.

Uses : The plant is refrigerant. Leaf juice is stomachic and laxative. Seeds are astringent and stimulant. Roasted seeds are aphrodisiac while fried seeds are diuretic. Ground seeds are eaten to stop mucous and blood while defication. Seeds are also used in skin diseases. When the seeds are inadequately cooked it can cause paralysis of limbs known as lathyrism.

References : 1, 3, 10, 12, 13, 21, 22.





(88) CICHORIUM ENDIVIA LINN.

COMPOSITAE

English Name : Endive, Batavian endive, Escarole.

Local Name : هندباء ، سلطة طويلة ، كاسينه

Description : An annual herb. Leaves in the form of rosette with nutty taste. There are many varieties.

Part Used : The leaves.

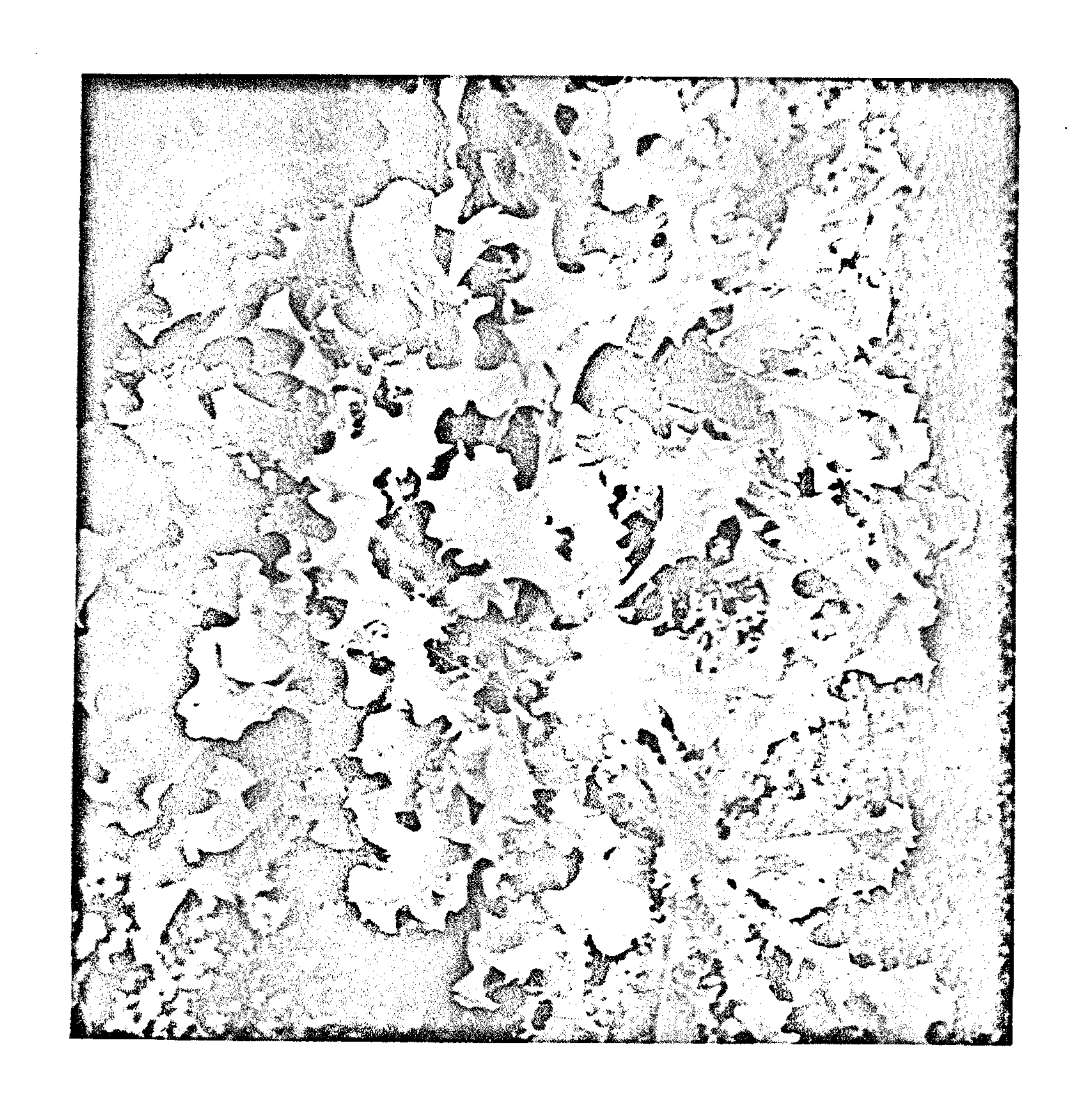
Principle constituents : The leaves contain the bitter principle intybin which is also called lactucopicrin.

Uses : Digestive, it is used as vegetable and as cooling medicine.

Roots are tonic, demulcent, used in dyspepsia and fever. Leaves are stimulant, carminative and used in rheumatism.

References : 1, 2, 3, 21, 24, 40, 57.





(89) CICHORIUM INTYBUS LINN.
COMPOSITAE

English Name : Common chicory, Chicory, Coffee- weed.

Local Name : شيكوريا ، سريس

Description : A rigid perennial plant with a branched stem reaching one meter high. Basal leaves are pinnatifid, upper leaves lanceolate. Flower- heads occur in groups of 2 or 3, flowers are ligulate, sky- blue in colour.

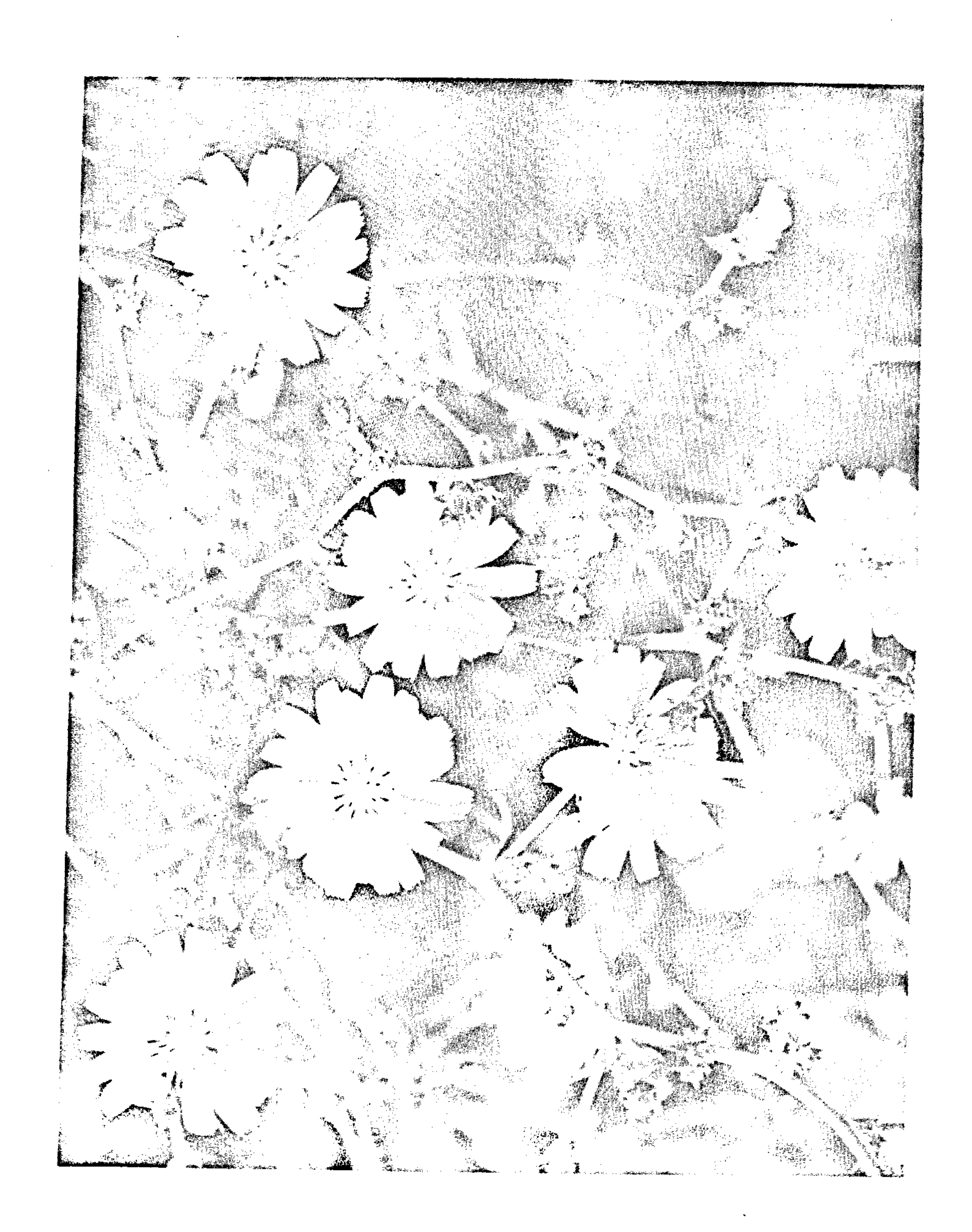
The plant is common as a weed in waste ground and roadsides, sometimes it is cultivated as vegetable or salad plant.

Part Used : Leaves, roots and seeds.

Principle constituents : Seeds contain cellulose, nitrogenous matter and fat. Roots contain latex, minerals, mucilage and inulin. Flowers contain glucoside cichorin, bitter principle lactucin $C_{15}H_{16}O_6$, lactupicrin $C_{23}H_{22}O_7$ m. p. 148 -51 C° dec . , betaine , choline , tannin , rutin , flavonoids and alkaloids .

Uses : Bitter - stomachic, tonic, emmenagogue, cholagogue, mild laxative and diuretic. Leaf extract is given to children mixed with almond oil as laxative. Seeds are carminative, tonic, demulcent and appetizer. Roots are added to powdered coffee as a sort of adultration. Young roots are edible like carrots and are used as fodder. Young bleached leaves are used in salade .

References : 1, 3, 10, 12, 20, 24, 38, 40, 54, 57.



(90) CINNAMOMUM CAMPHORA T. NEES.

LAURACEAE

English Name : Camphor- tree.

Local Name : كافور

Description : A large tree which can live thousands of years. It attains a hight of 8 - 15 m , produces camphor in the leaves and branches when young and in the wood of the branches when old. Flowers are greenish - white. The tree was introduced into Sidi El- Misri .

Part Used : Natural camphor obtained from the stems and roots of the tree.

Principle constituents : Volatile oil obtained by distillation containing camphor $C_{10}H_{16}O$ which crystalizes upon refrigeration then obtained by filteration .

Uses : It is used as antipruritic, carminative, cardiotonic, respiratory stimulant and antiseptic. Externally it is rubefacient in the form of linament.

References : 1, 3, 12, 13, 21, 22, 25, 26, 38, 40.



(91) CISTANCHE TUBULOSA SCHENK.
OROBANCHACEAE

Local Name : دانون ، هالوك

Description : A parasitic plant grows on Tamarix and Retama. Corolla yellow with violet limb, tube curved and constricted in the lower half, obtuse anther lobes.

Part Used : Powdered roots.

Principle constituents : Aromatic compounds.

Uses : Used in diarrhea. The powder is applied locally as a paste to abscesses, boils and carbuncles. Mixture of lemon juice and powdered root is administered for sore throat.

References : 1, 2, 3, 10, 14, 21.



(92) CITRULLUS COLOCYNTHIS SCHRAD.

CUCURBITACEAE

English Name : Bitter apple, Colocynth, Bitter gourd.

Local Name : حنظل ، مرارة الصحراء ، حدج

Descrition : The plant is climber but more usually a prostrate creeper or herb as there is seldom anything for it to climb on. Leaves are thick, rough, deeply and variously divided, about 100 mm in length. Flowers pale yellow, solitary. Fruits are globose, the size of an orange variegated green with white. Fruit intensely bitter.

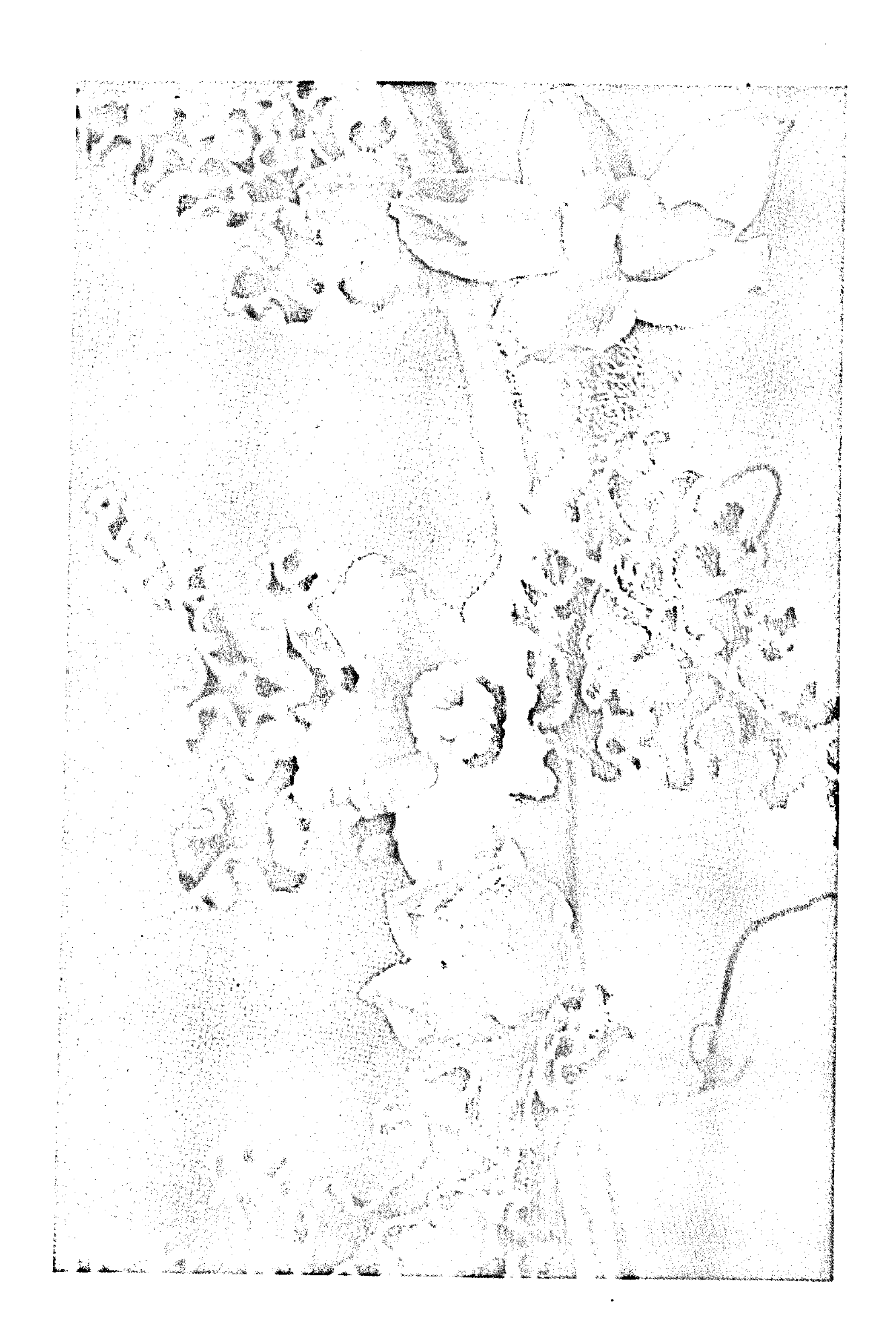
The plant is endemic throughout Libya on the light- soil in areas of low rainfall.

Part Used : Dried fruits deprived of its rind i. e. the bulb freed from the seeds and seed oil .

Principle constituents : It contains resins, alkaloids, pectin, saponins, colocynthin and colocynthitin which are terms applied to indefinite mixtures of compounds, citrullol alcohol and glycosides which upon hydrolysis give elaterin «A», elatericin «B» and dihydroelatericin «B». Elaterin A is known as cucurbitacin «E», elatericin «B» is known as cucurbitacin «I» and dihydroelatericin «B» is known as cucurbitacin «L». About eleven cucurbitacins have been isolated . The fruits contain hentriacontane $C_{31}H_{64}$. The juice contains citrullin , citrulluen and citrullinic acid.

Uses : Very powerful purgative or hydragogue cathartic, emetic and gastrointestinal irritant. It is usually given with hyoscyamus to prevent gripping. It is not given in case of pregenancy. It stimulates hair growth.

References : 1, 2, 3, 10, 11, 13, 14, 20, 21, 22, 25, 26, 33, 54.



(93) CITRULLUS VULGARIS SCHRAD.
CUCURBITACEAE

English Name : Water melon.

Local Name : دلاع ، بطيخ

Description : Water melon is a well known fruit cultivated everywhere.

Part Used : Fruit bulb and seeds.

Principle constituents : The bulb contains sugars, minerals mostly potassium, vitamines, mannitol, pectin, carotene and lycopin.

Seeds contain nitrogenous compounds, glutelin, globulin, proteoses and peptones. Seeds contain fixed oil about 20 - 40% and the enzyme urease.

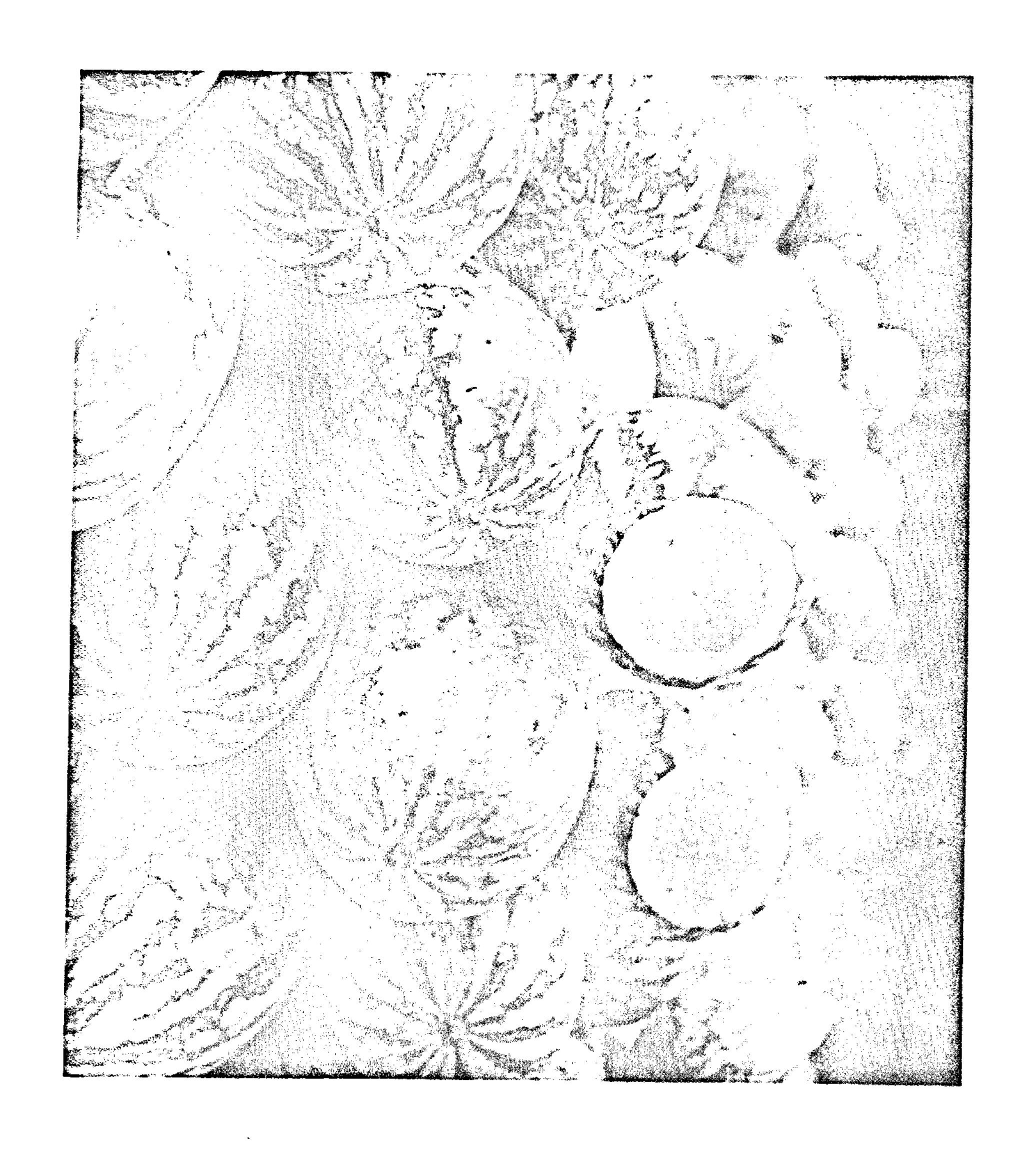
Juice conains citrullin 0. 17%.

Uses : The bulb is cooling, demulcent, diuretic and refreshing.

Seeds like the bulb and in addition they are tonic, aphrodisiac and vermifuge.

Seed oil is used as a substitute for almond oil.

References : 1, 3, 20, 21.



(94) CITRUS AURANTIUM LINN.

Var. amara

RUTACEAE

English Name : Sour orange, Bitter orange.

Local Name : شفش، لارنج ، نارنج ، كباد

Description : A small tree with spines on its branches, alternate evergreen leaves, white or pink flowers in groups of 2 - 3. The tree is cultivated for the production of the fruits.

Part Used : The rind of the unripe but fully grown fruit for producing bitter orange oil. The unexpanded flowers for producing neroli oil, fruit juice and leaves.

Principle constituents : Leaves contain ascorbic acid, volatile oil and stachydrine alkaloid. Fruits contain sugars, mucilage, citric acid, inorganic salts, the glycosides hisperidin, isohisperidin and aurantiamarin $C_{22}H_{17}O_{15}$, tannin and flavonoid pigments . The rind contains volatile oil containing limonene , naringin , aurantiamarin , flavonoid auranetin , hesperidin , 5 - 0 - desmethylnobeletin, citric acid and vitamin C. Flowers contain volatile oil known as neroli oil, bitter compounds and flavonoid pigments.

Uses : The fruit is diaphoretic, leaves are digestive, sedative, antispasmodic, used as mouth wash and gargle. Fruits are eaten as marmalade. It is laxative. The rind is aromatic, tonic, astringent, antiscorbutic and stomachic. Juice is good influanza preventive due to vitamin C contents. Root decoction is used in dysentery. Neroli oil is used in perfumery.

References : 1, 3, 10, 12, 13, 14, 21, 40, 43.



(95) CITRUS LIMONUM RISSO.
RUTACEAE

Sweet lemon var. dulcis ليم قارص حلو ، ليمون حلو

Small lime var . pusilla ليم قارص ، ليمون بلدي ، ليمون مالح

Description : Sweet lemon and limes with their varieties are known everywhere. Citrus trees are widely cultivated in Libya.

Part Used : Fruit and its juice.

Principle constituents : Fruits contain high percentage of citric acid, ascorbic acid and hesperidin. The dry rind contains diosmin m. p. 258 C° which gives rhamnose and glucose upon hydrolysis.

Uses : Juice is used as collyrium. Mixed with ginger or honey it is very good for treating cough and cold.

The juice and the rind are used in diarrhea and dysentery.

References : 1, 3, 10, 21.



(96) CITRUS PARADISI MACF.
RUTACEAE

English Name : Grapefruit.

Local Name : زمبوعي ، زمبوع ، ليمون هندي

Description : As the other citrus trees, Citrus paradisi is cultivated in Libya.

Part Used : Fruits.

Principle constituents : The fruit contains the glycoside naringin, B - sitosteryl - d - glycoside $C_{35}H_{60}O_6$ m. p. 298 C° and B - sitosterol . It is considered a good source of vitamins B 1 and C. The rind contains volatile oil containing lemonene, a compound known as friedelin, geraniol, cadinene, ascorbic acid, citral and carotene. It is rich in pectin.

Uses : The fruits cause rapid disappearance of sugar from urine of diabetic persons. It is also good for rheumatism. The juice is used for building up resistance to common colds infections. The rind is used for the production of pectin which is used in pharmaceutical preparations and food industry.

References : 1, 3, 10, 21.



(97) COCOS NUCIFERA LINN.
PALMAE

English Name : Coconut.

Local Name : جوز الهند

Description : A palm tree having long crooked or leaning trunk about 25 meters high, leaves occur only at the top in a graceful, globe- shaped mass.

The evergreen frond- like leaves are 360 - 540 cm long. The plant is cultivated for the production of the coconut fruit. It is a tropical plant, occurs in Libya in the south in Sabha and at the boarder lines with Sudan and Chad .

Part Used : Fruit, root, flowers and fruit oil.

Principle constituents : The fruit contains the enzymes invertin, oxydase and catalase, histidine, arginine, lysine, tyrosine, tryptophane, proline, leucine and alanine. Oil known as coconut oil about 57 - 75% contains mixed glycerides, phytosterols and squalene.

Uses : Fruits are sweet and edible, aphrodisiac and diuretic. They showed hypoglycemic activity. The oil is a very good hair tonic . The water of the unripe fruit is anthelmintic , cooling , useful in thirst , fever and urinary disorders .

Roots are diuretic, astringent and used in uterine diseases. Flowers are astringent.

Resin extracted from the inner husk of the fruit relieves toothache, and used as antiseptic.

References : 1, 3, 10, 13, 21, 22.



(98) COIX LACHRYMA LINN.

GRAMINEAE

English Name : Job's- tears, Coix millet.

Local Name : امدريان ، دمع أيوب

Description : An annual or perennial grass with narrow leaves 60 cm long and 5 cm wide. The pistillate spikelets bear small interesting beads whitish- grey, hard and shiny which can be stung on a thread for a necklace. The plant was introduced into Tripoli.

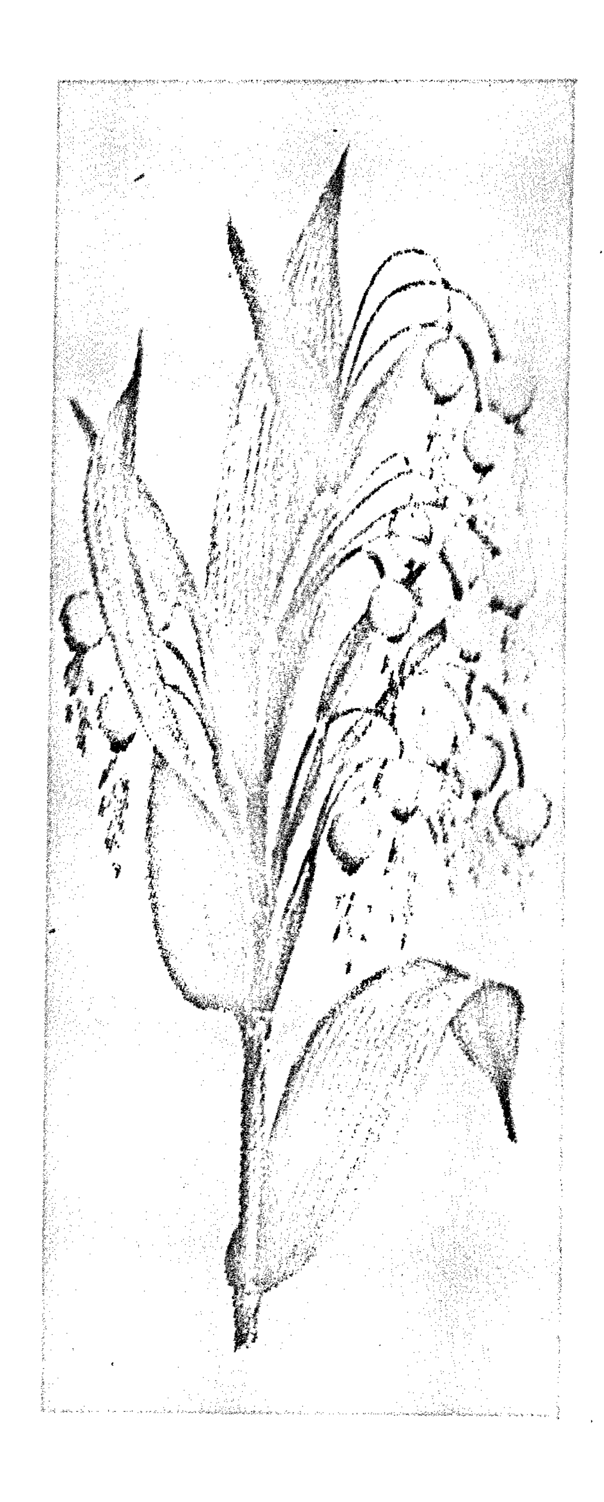
Part Used : The grains and roots.

Principle constituents : The plant contains the amino acids leucine, tyrosine, glutamic acid, arginine. histidine and lysine. It contains coixal a benzoxazole derivative $C_8 \dot{H}_7 O_3 N$ m.p. 151 - 2C^o, coicin known as prolamin, coixic, palmitic and myristic acids.

Uses : Grains are tonic, diuretic, diaphoretic and cooling. Roots are anthlmintic , in the form of decoctions , it is used in gonorrhea and menstrual disorders . Tincture of the glume is used for treating catarrhal infections, bronchitis and inflammatory conditions of the urinary organs. Glumes are diuretic and relieve rheumatism.

Coix flour is used like wheat flour.

References : 1, 3, 10, 21.



(99) COLCHICUM AUTUMNALE LINN.
LILIACEAE

English Name : Colchicum, Meadow saffron, Autumn crocus.

Local Name : لحلاح ، بصيله ، عكنه ، خمل
سورنجان

Description : A tuberous perennial plant, flowers in the autumn, after all the leaves have withered. Fruits appear with the narrow, glossy green leaves in the following spring. It has a pink flower.

Seeds and corms are collected for the isolation of colchicine. The plant occurs in Tripoli, Tarhuna and Garian.

Part Used : Corms and seeds.

Principle constituents : The alkaloids colchicine $C_{22}H_{25}NO_6$, colchiceine and demecoleine. It also contains resins and starch. Total alkaloids in the seeds is more than in the corms.

Uses : Colchicine is the drug of choice in the treatment of gout and rheumatism. Colchicine is used as a plant hormone in certain concentrations as it produces polyploidy. Colchicine is also a cytotoxic compound, it affects the spindle mechanism during mitosis, thereby blocking cell division. Colchicine and demecoleine are anti cancer. Colchicine is very toxic. It is known as « vegetable arsinic » or « plant arsinic ». Toxicity symptoms appear as burning of throat and stomach, vomiting, kidney and respiratory failiure then death.

References : 1, 3, 12, 20, 22, 25, 26, 27, 28, 33, 37, 38, 40, 54.



(100) COLEUS SP.
(101) C . BARBATUS BENTH .
(102) C . ESCULENTUS G . TAYL .
(103) C . KILIMANDSCHARI GUERKE .

LABIATAE

Description : An aromatic ornamental herb with broad ovate hairy fleshy colourful leaves of different colours. Flowers are small borne on erect spike having different colours.

Part Used : Leaves and tubers.

Principle constituents : The three species contain volatile oil with pleasant odour. The oil contains cineole.

Uses : C. barbatus is used in Egypt and in Arabia as expectorant, emmenagogue and diuretic.

The tubers of C. esculentus are eaten in Rhodesia like potato. C. Kilimandschari relieves stomach pain, it is used in cases of vomiting, heart- burn, hook- worms, habitual abortion and epilepsy.

Leaf juice is applied to wounds.

References : 1, 3, 10.



(104) CONIUM MACULATUM LINN.

UMBELLIFERAE

English Name : Poison hemlock , Hemlock .

Local Name : شوكران ، طحاء ، بسبس بري

Description : A large annual plant 50- 200 cm high. The stem is hollow with reddish- purple blotches. When crushed the plant emits a mousy disagreable odour. Leaves pinnate incised. Flowers are white and occur in large umbel.

Fruits are smooth and rounded. The plant occurs in Wadi El kuf.

Part Used : Fruits.

Principle constituents : The plant contains the alkaloids coniine, conhydrine, pseudoconhydrine, coniceine, piperidine and methyl piperidine. It contains also volatile oil, flavonoid glycosides and coumarines.

Uses : The plant is very toxic. Due to its toxicity it is rarely used medicinally. It was used for cancer, arteriosclerosis and inflammation of prostate. The plant when mistaken as parsley is very toxic, produces vomiting, diarrhea, mental confusion, convulsions, paralysis and may cause death. The alkaloid is destroyed by drying and therefore the dried hey is of little danger to cattle and live-stock than the fresh.

References : 1, 3, 19, 21, 22, 25, 26, 27, 28, 32, 33, 38, 40.



(105) CONVOLVULUS ARVENSIS LINN.

CONVOLVULACEAE

English Name : Bind weed, Field bind- weed, Corn lily.

Local Name : قداد ، حلجة ، عليق ، لبلاب الحقول
طربوش الغراب

Description : A tall perennial with climbing stems of 7.5 m. in length, leaves sagittate. Flowers are coneshaped pink or white, odourless 4- 6 cm in diameter. The plant has a very long rhizome which breaks easily. It is considered a difficult weed to get rid of in gardens and cultivated area.

Part Used : Herb and roots.

Principle constituents : Roots contain Resins about 1-4%, bitter principles, the glycoside convolvulin and tannin. The leaves contain more tannin and less resins than the roots. Leaves contain also saponins.

Uses : Roots are laxative, cholagogue, diuretic and relieve toothache.

The herb is used in the form of dressing for wounds. The plant is very toxic, it produces gastrointestinal irritation. It is also irritant to the mucus membranes of the alimentary tract. It causes eruptions, flatulent colic and liquid stools.

References : 1, 2, 3, 4, 10, 12, 13, 14, 21, 22, 40.



(106) CORCHORUS OLITORIUS LINN.

TILIACEAE

English Name : Jaw's- mallow, Nalta jute.

Local Name : ملوخية

Description : An annual cultivated herb with an erect glabrous stem and a small yellow flowers. Leaves lanceolate, serrate. Fruit a siliquose capsule.

The plant is cultivated as vegetable.

Part Used : Leaves and seeds.

Principle constituents : Leaves contain the glycosides corchoroside A $C_{29}H_{42}O_9$ m. p. 188 - 90 C°, corchoroside B $C_{29}H_{44}O$ m. p. 222 - 4 C° and olitorin $C_{29}H_{44}O_9$ m. p. 157 - 62 C°, enzyme oxydase , chlorogenic acid , erysmin , vitamins and saponins . It is reported to contain HCN .

Seeds contain beta - sitosterol , corchoralic acid $C_{26}H_{52}O_3$, bitter principle corchorin $C_{23}H_{22}O_6$ m. p. 175 C° which is identical with strophanthidin, raffinose , resin , chlorogenic acid and fixed oil .

Uses : Leaves are demulcent, tonic, diuretic and lactagogue. It is used for softening and drawing the breast and in abdominal diseases and as vegetable. Seeds are purgative.

References : 1, 2, 3, 4, 10, 13, 21.



(107) CORDIA MYXA LINN.
BORAGINACEAE

English Name : Assyrian plum, Cordia.

Local Name : دبق ، مخيط ، مخاطه

Description : A deciduous tree up to 7 m high. Leaves glabrous, entire, broadly ovate and undulate. Flowers white clustered. Corolla tube as long as calyx. Lobes oblong recurved as long as tube. Fruit ovoiddrupe. The plant occurs in Fueihat in Benghazi area.

Part Used : Fruit, bark, kernel and leaves.

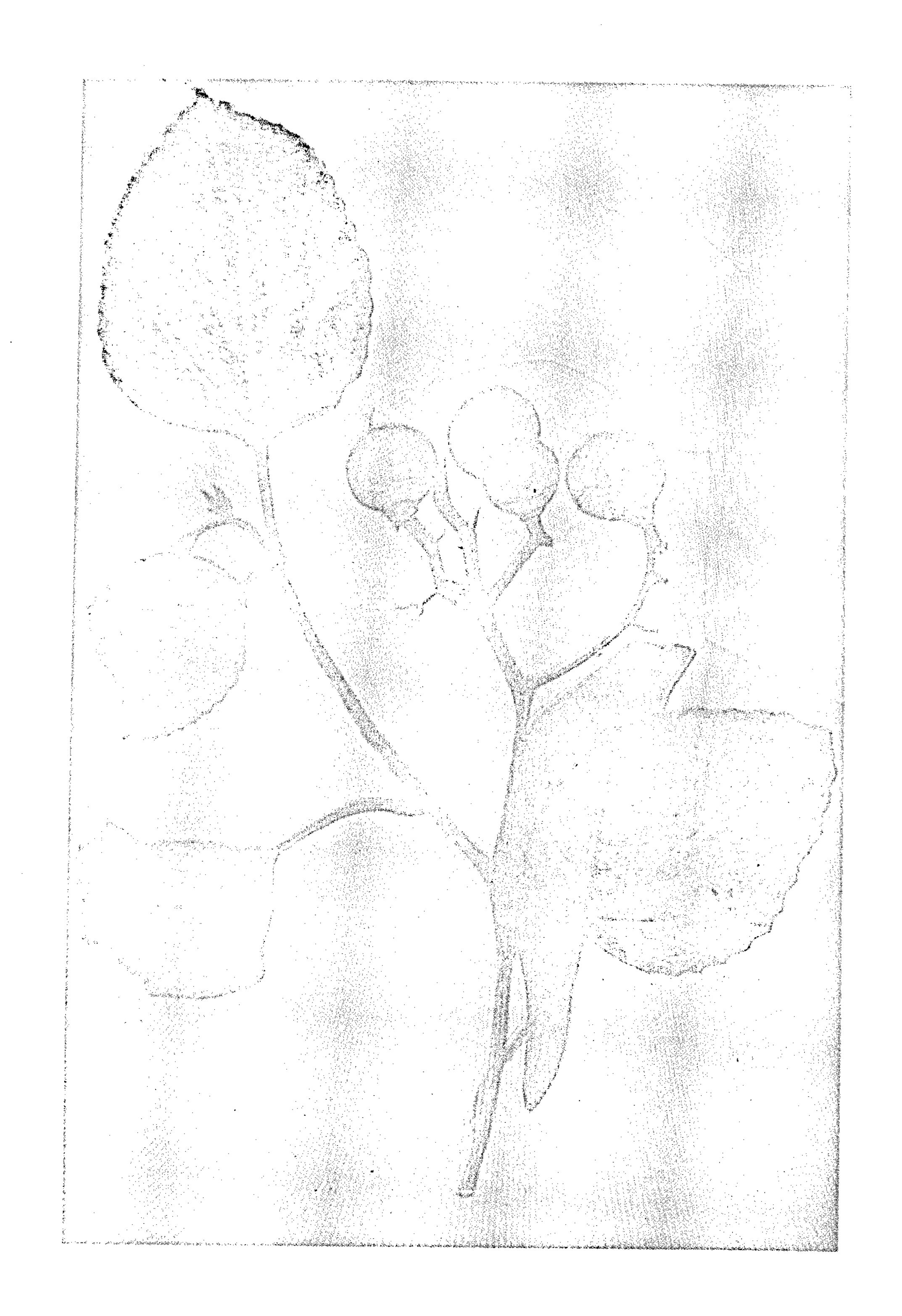
Principle constituents : Carbohydrates mainly sugars, mucilage and gums.

Leaves and fruits contain sterols.

Uses : Fruits are used in the treatment of chest and urinary complaints. They are astringent, diuretic, demulcent and expectorant.

The seeds are remedy for ringworms. A decoction of the bark is used in dyspepsia and fever. Leaves are applied to ulcers.

References : 1, 3, 13, 14, 20, 21.



(108) CORIANDRUM SATIVUM LINN.
UMBELLIFERAE

English Name : Coriander.

Local Name : کسبر ، کزبر ، کسبره

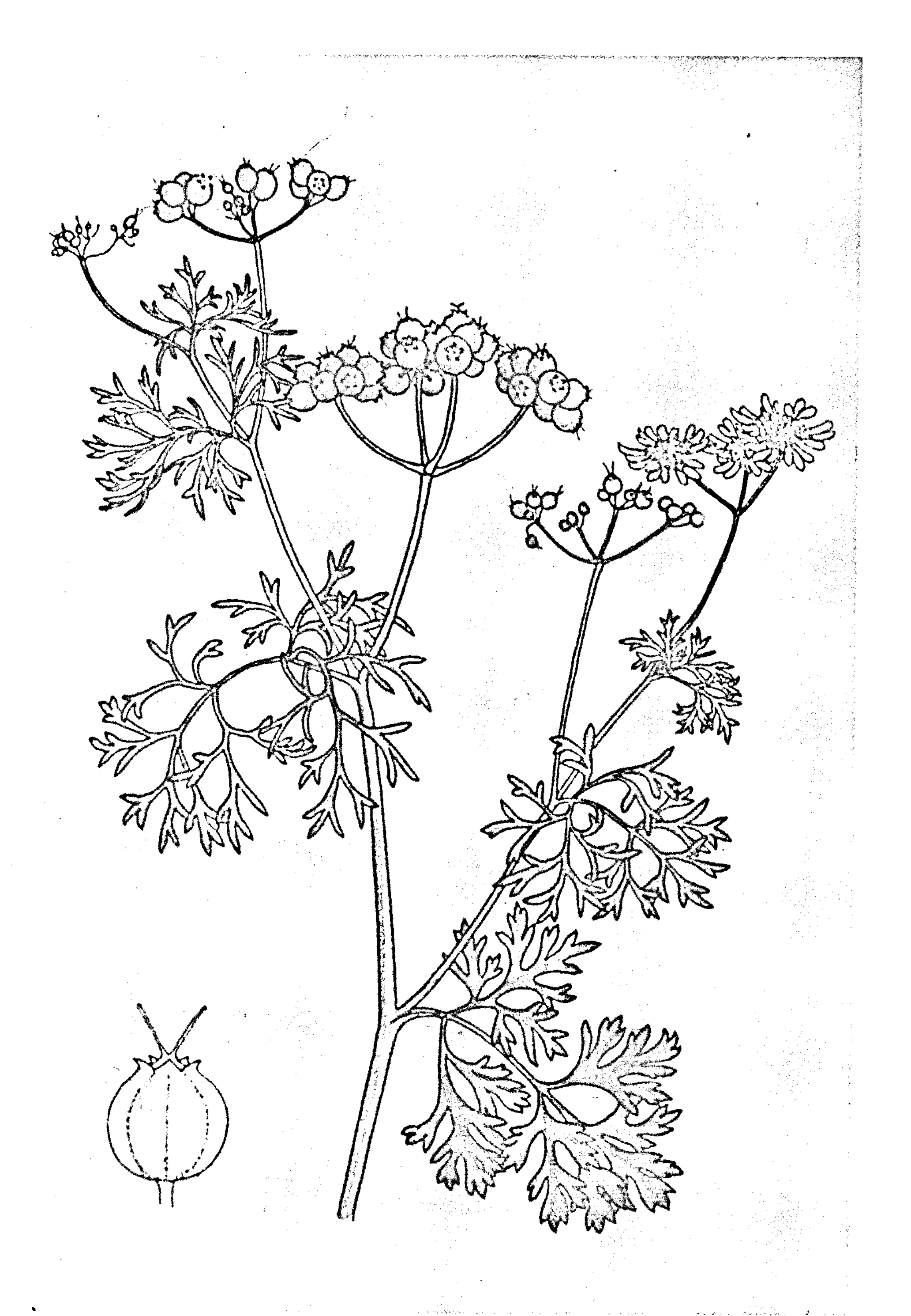
Description : A popular strong smelling herb with 2 or 3 times pinnately compound leaves and small white flowers cultivated for its fruits or seeds which are used for seasoning food and in confectionary. Stems are slender forked in pairs, flowers occur in umbel with 5-8 rays. Fruits are globular and aromatic.

Part Used : Fruits and their volatile oil.

Principle constituents : Fruits contain 0.5-1 % volatile oil containing linalool known as coriandrol, pinene, terpinene, borneol and geraniol. They contain fixed oil about 13 %, vitamin C, calcium oxalates and tannins.

Uses : It is used as carminative, stomachic, antispasmodic, and aphrodisiac. Fumes of the fruits are smoked or inhaled to relieve headache. It shows hypoglycemic activity. Fruits are sometimes used for flavouring cigarettes. The oil is used externally in the treatment of rheumatism and pains in the joints. Fruits are used as condiment.

References : 1, 2, 3, 10, 12, 14, 18, 21, 24, 25, 26, 38, 40, 43, 54.



(109) CRAMBE MARITIMA LINN.
CRUCIFERAE

English Name : Sea kale, Sea - cabbage.

Local Name : كرنب بري

Description : A perennial herb belonging to the Mustard family sometimes grown as ornamental plant because of its fleshy, glaucous- blue foliage, with radical leaves 60 cm long and often as broad. Flowers are white in panicles and fruits are two- pointed pods, each pod with one seed. Root is thick.

The plant is introduced and cultivated in Libya.

Part Used : Leaves and leaf stalks.

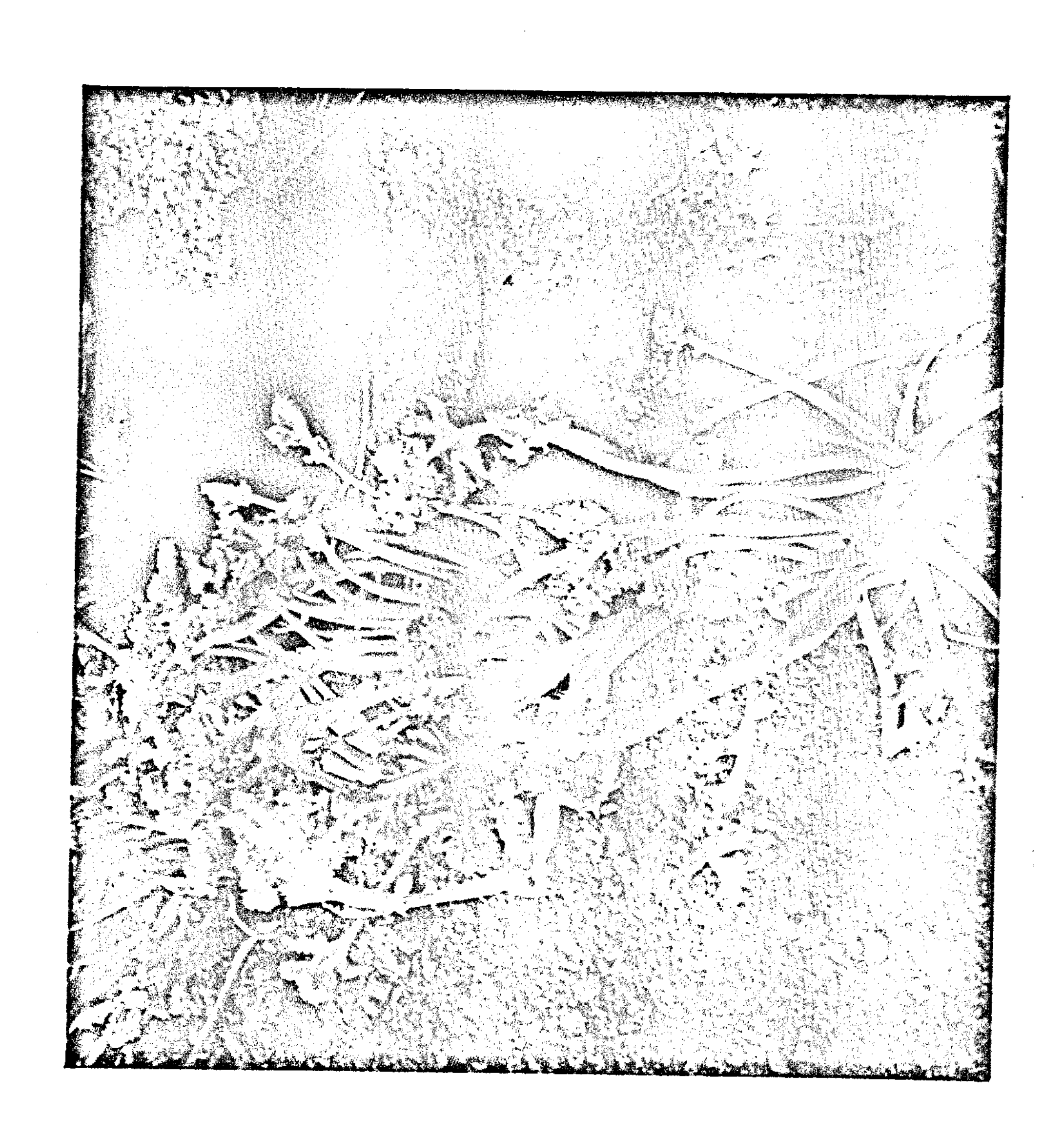
Principle constituents : Not investigated.

Uses : It helps healing wounds and ulcers. Seeds are anthelmintic.

It is edible, used as vegetable like asparagus or as salad.

References : 1, 3, 38.





(110) CRATAEGUS OXYACANTHA LINN.
ROSACEAE

English Name : Thorn, Hawthorn, White- thorn, May-tree.

Local Name : زعرور، زعرور الأودية، الشوكة الحادة

Description : A spiny tree often bushy. Leaves small glossy slightly lobed. Flowers white with rounded petals 2- 3 styles. Each fruit has 2- 3 nuts. The plant occurs in Tripoli, Homs and Benghazi.

Part Used : Flowering tops, fruits and leaves.

Principle constituents : Leaves, flowers and fruits contain flavonoids hyperoside and vitexin rhamnoside, leucoanthocyanidins and their triterpenic derivatives, crataeguslactone which contain crataegolic acid, ursolic acid and oleanolic acid. The plant contains the glycosides isoquercitrin, luteolin and kaempherol, saponin and traces of the alkaloid nicotine.

Uses : Diuretic, haemostatic, antispasmodic, sedative and slightly hypotensive. It is used without side effects in heart diseases as cardiotonic. It helps in tachycardia, vulvular insufficiency and in the treatment of insomnia which is of nervous origin.

Reference : 1, 3, 12, 21, 38, 40, 43.



(111) CRESSA CRETICA LINN.
CONVOLVULACEAE

English Name : Alkali weed, Rosin weed.

Local Name : مليخ ، ندوة ، غراره ، نعيم

Description : A dwarf shrub 10- 20 cm high. with slender woody stems and numerous tiny hairy branches. Leaves small sessile ovate to lanceolate silky hairy.

Flowers yellow to pink in clusters.

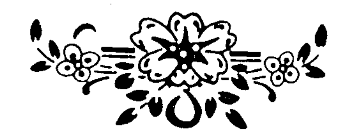
The plant grows in Tripoli and Benghazi.

Part Used : The whole herb.

Principle constituents : The herb contains N- octacosanol and beta - sitosterol .

Uses : It is used as tonic, stomachic,aphrodisiac,alterative and expectorant.

References : 1, 2, 3, 7, 12, 13, 14, 21.



(112) CROCUS SATIVUS LINN.
IRIDACEAE

English Name : Saffron, Crocus, Spanish saffron.

Local Name : زعفران ، شعر الزعفران
راس الزعفران

Description : A tuberous perennial stemless herb. It has pale lilac flowers spread widely to form a star in the daytime and close at night, blooming in the autumn. The stigmas are bright orange. The corm is covered with membranous tunics. Leaves are linear appear with or after the flowers.

The plant was introduced and became commonly cultivated in Garian.

Part Used : Dried flower stigmas and tops of styles.

Principle constituents : volatile oil, fixed oil, sugars, the glycosides alpha , beta 8 gama crocin , picrocrocin and crocetin , lycopene , beta - carotene , gama - carotene and zeaxanthin . Crocin is the colouring principle in soffron while picrocrocin is colourless . Upon hydrolysis picrocrocin gives the aldehyde safranal .

Uses : Sedative, stimulates apetite, aphrodisiac, stomachic, antispasmodic, emmenagogue and promotes menstruation. Crocin is a colouring matter effective in dilution one part in one thousand, used as dye and in perfumes.

The plant produces severe haemorrhage when given in large doses (few grams). In India it is used in fever, melancholia and liver enlargement.

References : 1, 3, 12, 20, 21, 22, 24, 25, 26, 33, 38, 40, 54.



(113) CROTALARIA JUNCEA LINN.
LEGUMINOSAE

English Name : Sun - hemp plant.

Local Name : قنب الكروتالاريا

Description : An annual shrub about 120 cm high. Stem erect, silky- downy. Leaves simple scarcely stalked linear oblong tapered at both ends, downy beneath. Flower rich yellow in a terminal raceme.

The plant was introduced and cultivated in Tripoli.

Part Used : Leaves, roots and seeds.

Principle constituents : Seeds contain protein and the plant contains unknown alkaloids.

Uses : Leaves are refrigerant, demulcent, emetic, purgative, emmenagogue and abortifacient. Roots are astringent.

The plant is used for the production of tough fibers. It is toxic to livestock.

References : 1, 3, 10, 12, 13.



(114) CROTALARIA RETUSA LINN.

LEGUMINOSAE

English Name : Crotalaria.

Local Name : كروتالاريا

Description : A shruby herb 60 - 120 cm high. Leaves obovate, oblanceolate 3 cm long. Flower yellow with purple veining. Fruit is a glabrous pod 3 cm long. The plant was introduced and cultivated in Tripoli.

Part Used : Seeds.

Principle constituents : Seeds contain the pyrrolizidine alkaloids mainly retusine and retusamine, isoquercitrin and monocrotaline. Leaves contain indican.

Uses : The seeds are hypotensive, mutagenic and have anti - tumer activity . They are used to treat scabies .

The plant is toxic especially to the liver.

References : 1, 3, 11, 13, 21.



(115) CUCUMIS MELO LINN.
CUCURBITACEAE

English Name : Melon, Sweet melon.

Local Name : قلعاوي ، قاوون

Description : An annual climbing or creeping herb with large soft, hairy leaves and spherical , ovoid or eliptic fruits of varying size and colour. The flesh of the fruit is sweet and delicious.

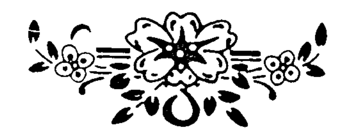
Part Used : Fruits and seeds.

Principle constituents : Fruits contain protein, carbohydrates, fat, fibers, ash, minerals and vitamins A , B_1 , B_2 and C Seed kernels contain fixed and volatile oils, protein and ash.

Uses : Fruits are mild diuretic, demulcent and cooling. Externally it is used as lotion in treating eczema. Roots are purgative and emetic.

Seeds are nutrient due to the oil contents, diuretic and useful in painful discharge and suppression of urine. The plant extract inhibits fungal activity.

References : 1, 3, 10, 13, 20, 21, 39.



(116) CUCURBITA MAXIMA DUCH.
CUCURBITACEAE

English Name : Pumpkin, Winter squash.

Local Name : قرع حلو

Description : An annual vine, planted for its edible fruits which are furrowed or ridged.

Leaves are rounded or kidney shaped. There are many varieties.

Part Used : Seeds, bulb and fruit stalk.

Principle constituents : The fruit contains sugar glucose, pigments , curcurbitin $C_{40} H_{56}$ m. p. 179 - 80 C° lutein , and cucurbitaxanthin $C_{46} H_{56} O_2$ m. p. 180 C° . It contains also niacin , riboflavine and aneurin . Seeds contain volatile oil , comphene , pinene and myrecene . The embryo of the seed contains the cucurbitacine which is an isoprenoid compound .

Uses : Seeds are used in sea- sickness to stop vomiting. They are good non - poisonous anthelmintic , teaniacide and diuretic .

Fruits are good food baked or boiled.

References : 1, 3, 10, 11, 12, 13, 20, 21, 24, 39, 40.



(117) CUCURBITA PEPO LINN.

Var. ovefera

CUCURBITACEAE

English Name : Vegetable marrow, Squash

Local Name : قرع ، قرع كوسه ، كوسه
قرع رومي

Description : A large annual plant having a creeping stem which can measure up to 10 m long . Leaves very large, cordate, rough and covered with spiny hairs. Flowers large, bright yellow. Fruit generally very large and hollow containing flat oval white seeds. Fruits are of different shapes and sizes.

The plant is cultivated as a vegetable.

Part Used : Seeds, Flowers, Fruits and leaves.

Principle constituents : Seeds contain isoprenoids, cucurbitacin B and volatile oil containing pinene , terpinene, terpenolene, borneol, carvacrol, terpeneol, eugenol, nerol, farnesol and p- cymene.

Uses : Seeds are anthelmintic, used in the case of sea - sickness to prevent vomiting . It is also used as teaniacide followed by saline purgative . Fruits are edible as vegetable . Cucurbitacin is capable of blocking the cellular division at the metaphase stage and therefore was tried as anticancer . Seeds are also used in case of prostate enlargment . Leaves are used externally for treating burns .

References : 1, 3, 10, 12, 13, 20, 21, 22, 24, 25, 39.



(118) CUMINUM CYMINUM LINN.

UMBELLIFERAE

English Name : Cummin.

Local Name : كمون حوت ،كمون ،كمون أخضر
سنوت

Description : An annual herb with threadlike leaves, small white or rose- coloured flowers in compound umbels. Seeds are similar to caraway.

The herb is cultivated as a condiment plant for the production of fruits.

Part Used : Fruits known as seeds and their volatile oil.

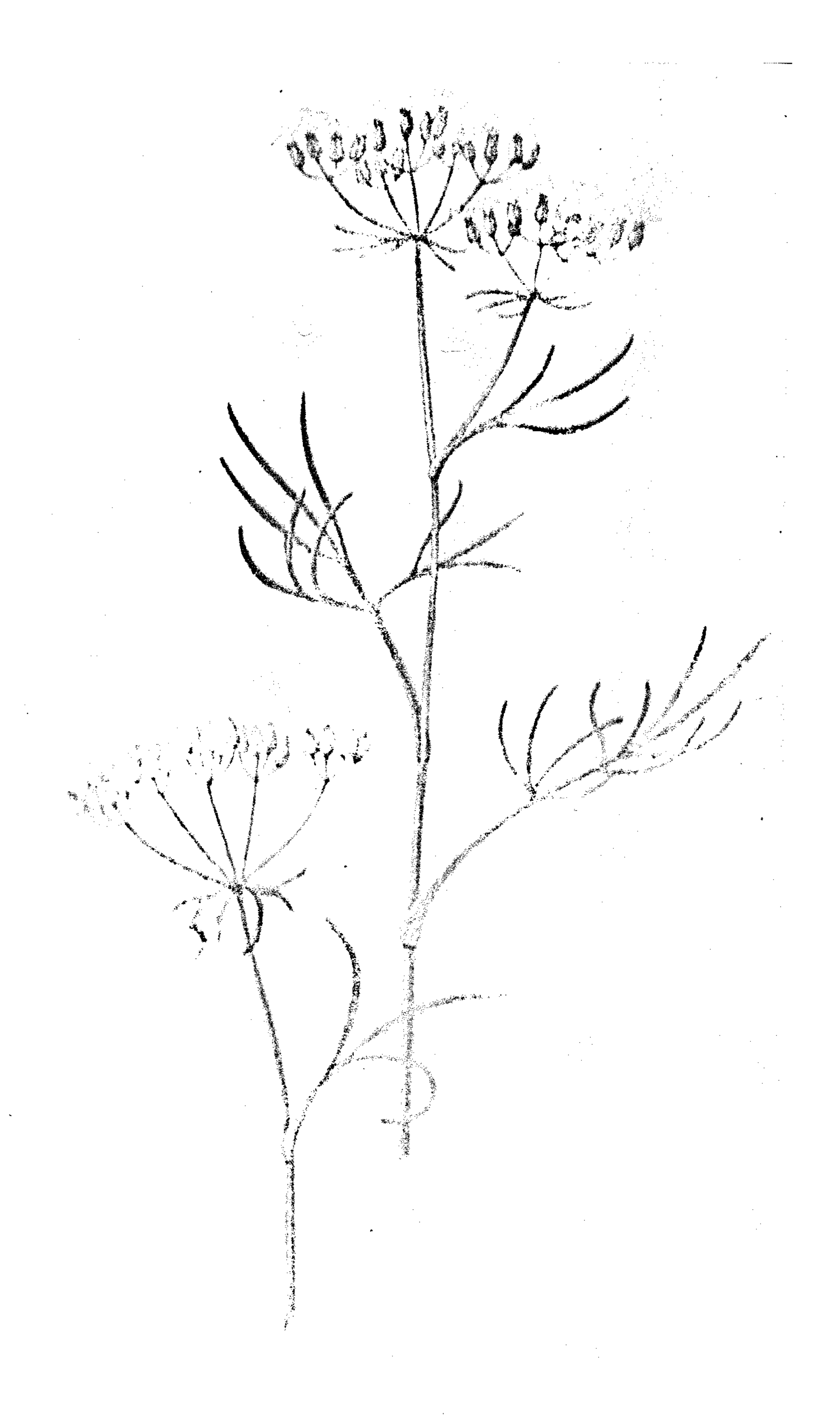
Principle constituents : volatile oil rich in cuminic aldehyde , pinene , alpha - terpeneol , dipentene and phellandrene .

Uses : Although the fruits are extensively used as condiment and in seasoning food, they are of great value in medicine.

They are carminative, antispasmodic, aromatic and stomachic. Cummin is commonly employed in veterinary medicine.

References : 1, 3, 12, 18, 20, 21, 24, 25, 26, 38, 40, 54.





(119) CUPRESSUS ARIZONICA GREANE .
(120) CUPRESSUS SEMPERVIRENS LINN .
CONIFERAE

English Name : C. arizonica. Mediterranean cypress, Evergreen cypress

C . sempervirens. Arizona cypress.

Local Name : سرو ، أرز ، شجرة الحيات

Description : An evergreen tree branching either horizontal or upright. The columnar type is only 1- 2m in diameter and about 15 m tall. In horizontal branching, branches form a very wide head. Leaves bluish- green. Cones small about 3 cm across.

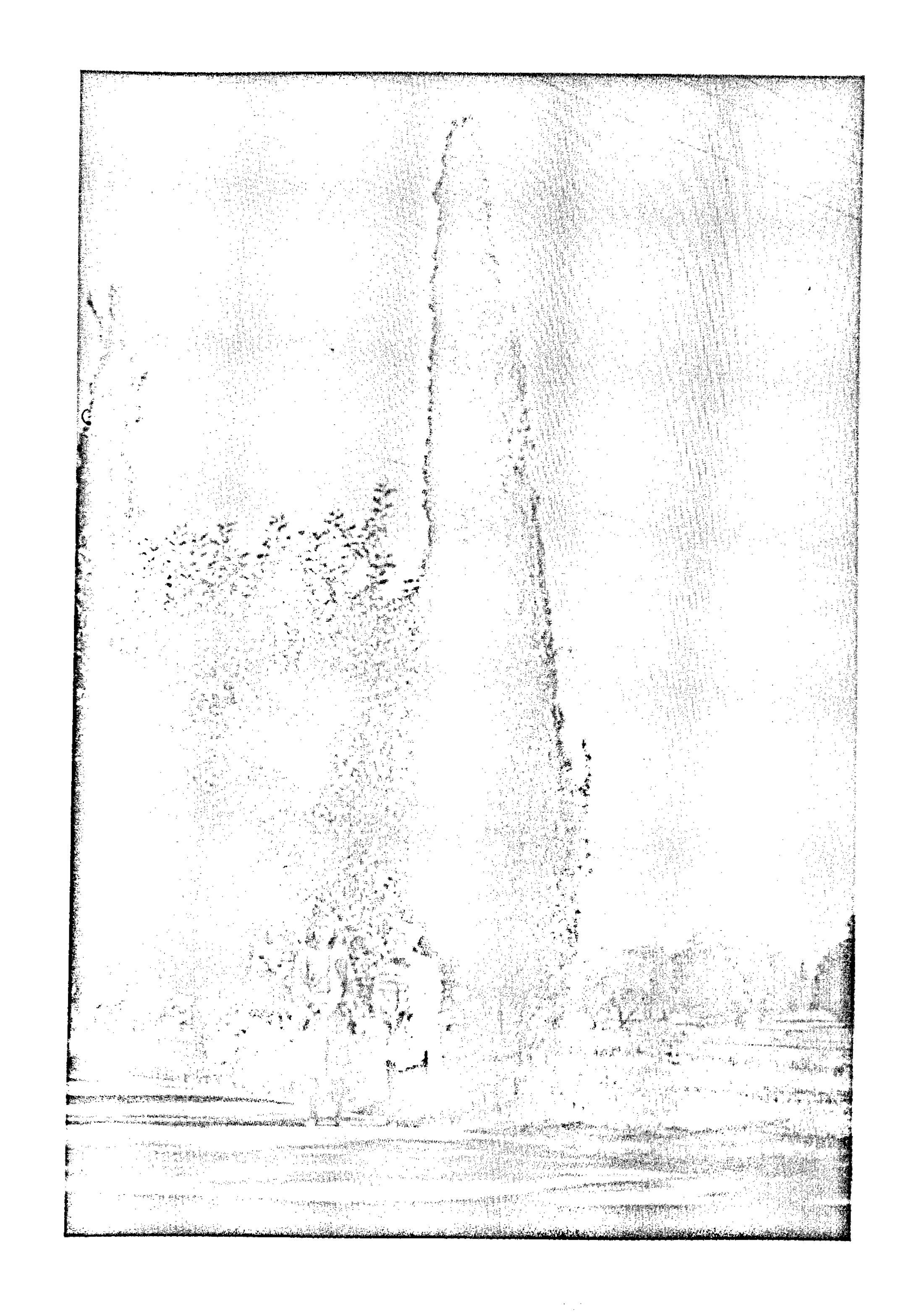
Part Used : Cones, wood and fruits.

Principle constituents : The plant contains tannins, camphor, piperitone, cupressu- flavone, sugars and volatile oil containing alpha and beta pınene , camphene , phellendrene , p - cymene , lemonene and terpeneol .

Uses : The wood is astringent, antidiarrhetic and in the form of ointment it is used in the treatment of haemorrhoids.

The oil is valuable in perfumery, used in manufacturing deodorant soaps and household sprays. The oil is hair tonic and it alleviates the temporary distressing effect of whooping cough. It is effective against staphylococcus aureus and bacillus subtilis. Leaves have vermifuge properties.

References : 1, 3, 11, 13, 21, 39.



(121) CUSCUTA EPITHYMUM LINN .

CONVULVULACEAE

English Name : Small dodder, Thyme dodder, Devil's gut.

Local Name : حاض الأرنب ، شكونا ، كشوت

Description : A red twining stem attaching itself to the host plant which is usually Thymus vulgaris , Artemesia herba - alba,¦Capparis and others by means of haustoria . Flowers small in heads , corolla white or wax - like .

The entire plant contains flavonoids and it is used as cholagogue and purgative.

References : 1, 3, 25, 28, 40.



(122) CUSCUTA EUROPAEA LINN .

CONVULVULACEAE

English Name : Dodder.

Local Name : حريره الزعتر ، حامول

The plant climbes Thymus vulgaris. It contains resinous glucosides cuscutin and cuscutalin, the latter is toxic.The plant is used as laxative.

References : 1, 3, 13, 21, 40.



(123) CYCAS REVOLUTA THUNB.
CYCADACEAE

English Name : Cycad, Sago palm of Japan.

Local Name : نخيل ذيل الجمل

Description : An ornamental,flowerless seed plant. Male and female sex on different individuals 1.8-3 m high. Fruit red.

The plant is planted in gardens and parks in Tripoli and Benghazi.

Part Used : The plant is toxic.

Principle constituents : The plant contains the colouring compound sago, the fatty aeids palmtic, stearic, oleic and behenic. Seeds contain cycasin and neocycasin which are toxic glycosides considered as mutagens and teratogens.

Seeds are also known to contain carcinogenic compounds.

Uses : The plant is expectorant but it is not used because of its toxicity.

The fleshy seeds are very poisonous.

References : 1, 3, 21, 22.



(124) CYDONIA OBLONGA MILL .
CYDONIA VULGARIS PERS .
ROSACEAE

English Name : Quince.

Local Name : سفرجل

Description : A fruit tree with short trunk having grey bark. Leaves oval tomentose. Flowers pink, large. Fruits yellow, large, pear- shaped, angular with hard flesh.

The plant is cultivated as a fruit tree.

Part Used : Fruits, bark, seeds and leaves.

Principle constituents : The fruits contain pectin. Seeds contain mucilage, rich in pentosanes (arabinose and xylose), fixed oil, small amounts of cyanogentic glycosides including amygdalin.

Uses : The mucilage is emollient, expectorant, demulcent, emulsifying agent and used in making hair fixing preparations. Syrup is used to treat throat inflammations. It is astringent and antidiarrheal. Boiled leaves are used to treat kidney calculi. Fruits are edible and eaten as jelly and jam.

Seeds are used in diarrhea, dysentery and fever.

References : 1, 3, 12, 21, 24, 25, 26, 38, 40.



(125) CYMBOPOGON CITRATUS STAPF.
ANDROPOGON CITRATUS HORT.
GRAMINEAE

English Name : Lemon grass.

Local Name : حشيشة الليمون

Description : A perennial densely tufted cultivated grass with loose panicle having slender branches nodding at the ends.

The plants is cultivated for the production of its volatile oil.

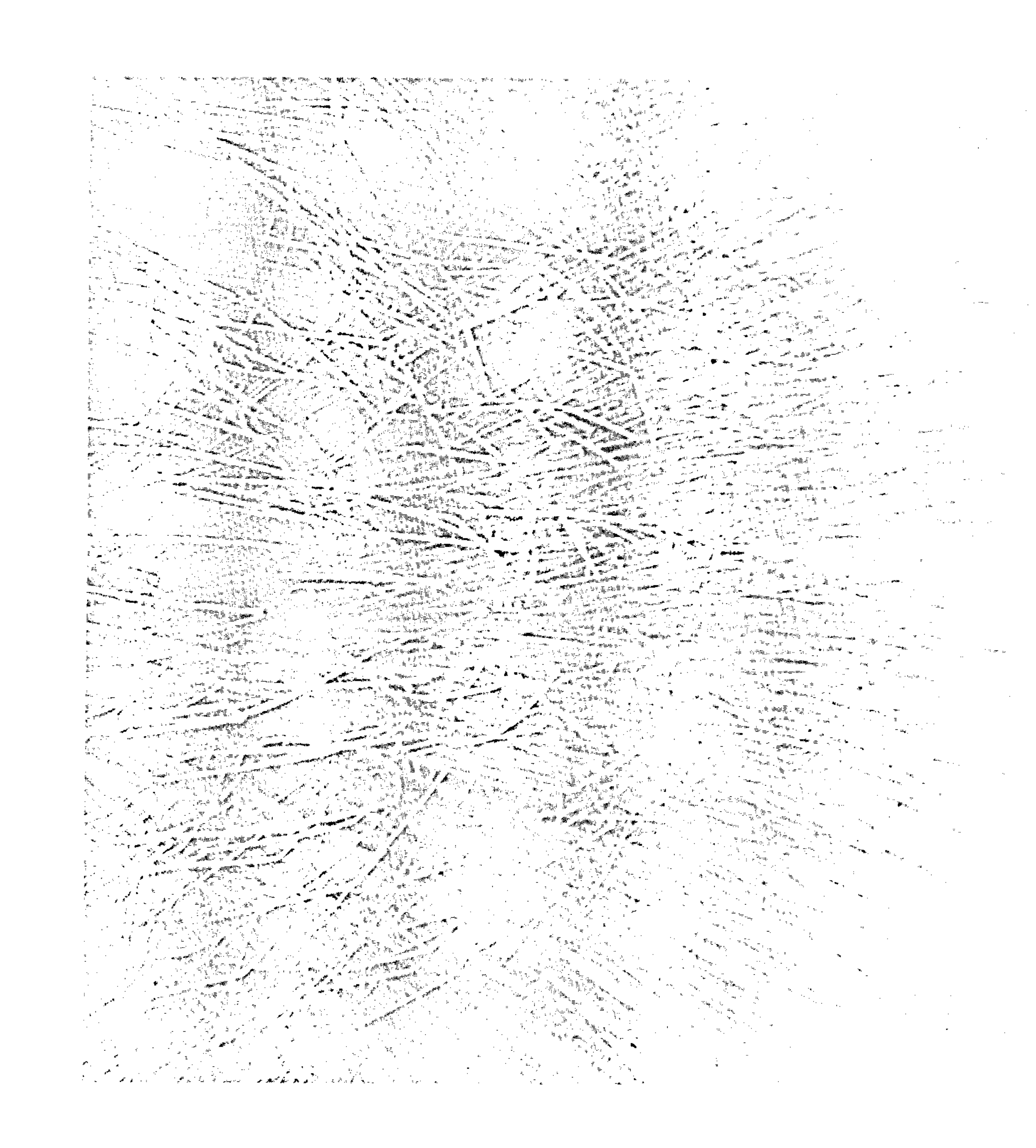
Part Used : Leaves and volatile oil obtained from them.

Principle constituents : Leaves contain volatile oil containing citral, geraniol , geranyl acetate, citronellal , piperitone perillyl alcohol and nerolidol . Fresh plant oil contains upto 85 % citral.

Uses : Leaves are antipyretic and stimulant. Oil is carminative, used as flavouring agent and in perfumery especially in manufacturing soaps.

An infusion of the leaves is sometimes taken as a substitute for tea as a refreshing beverage.

References : 1, 3, 12, 13, 17, 21, 26, 54.



(126) CYMBOPOGON SCHOENANTHUS SPRENG.

ANDROPOGON SCHOENANTHUS LINN.

GRAMINEAE

English Name : Camel's hay, Sweet rush.

Local Name : أبـو ركبـة ، بوركبـه ، حشمه ، تين مكة
أذخر ، أذخر مكي

Description : A perennial aromatic grass with dense tufted growth. Leaves very thin, panicle loose with simple branches.

The plant is cultivated for the production of its volatile oil.

Part Used : The whole herb and its volatile oil.

Principle constituents : Herb contains volatile oil containing geraniol similar to oil of lemon grass. It contains citral and citral can be converted to ionone with the violet odour which is a rare compound in nature.

Uses : The herb is antispasmodic, carminative, tonic, diaphoretic and considered as an excellent stomachic for children. It is used in disordered menstruation and in congestive and neuralgic forms of dysmenorrhea. It is also used for flatulance. Externally it is a rubifacient in case of rheumatism. Roots are used in perfumery and as a source of camel's hay oil.

References : 1, 2, 3, 12, 14, 20, 21.



(127) CYNARA SCOLYMUS LINN.
COMPOSITAE

English Name : Artichoke.

Local Name : خرشوف

Description : A cultivated annual vegetable plant 1 - 2 m high with very large heads, purple, scales unarmed, receptacle fleshy.

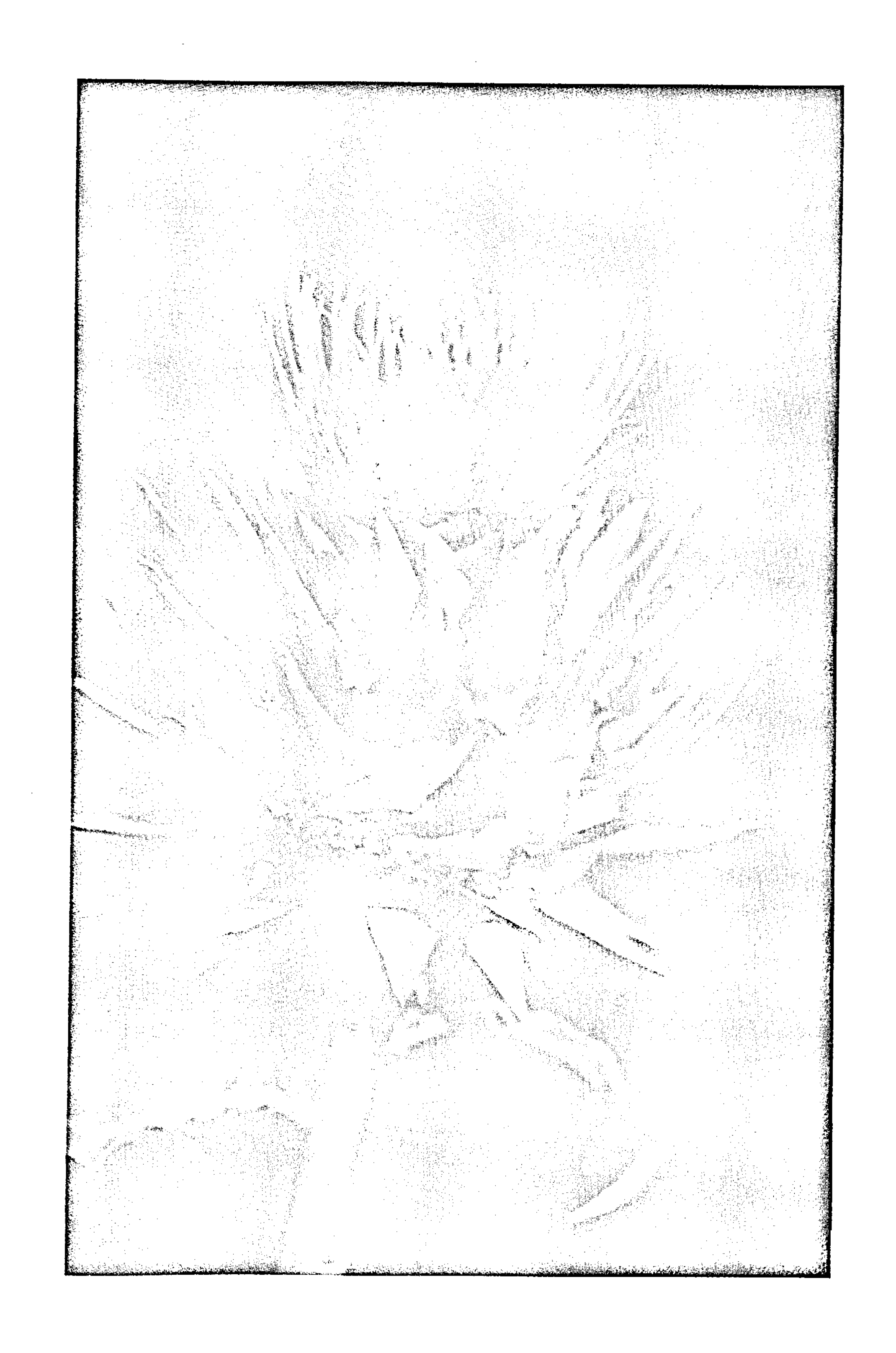
Part Used : Leaves, flowers and unexpanded capitulum.

Principle constituents : The bitter principle cynarin, chlorogenic acid, tannin, lactones, sesquiterpenes, pigments and the enzymes catalase, oxidase, peroxidase, cynarase and ascorbinase. The receptacle and bases of bracts are rich in inulin. They contain steroidol saponins.

Uses : The plant is a good cholagogue, diuretic, effective against arteriosclerosis and diabetes. Cynarase coagulates milk in dilution of 1 in 150,000 parts, this property is utilized in cheese manufacturing.

It is nutrient used in case of anemia and some skin diseases. Inulin is valuable in the diet of diabetic patients.

References : 1, 3, 21, 22, 24, 38, 39, 40, 43.



(128) CYNODON DACTYLON LINN.
GRAMINEAE

English Name : Bermuda grass, Finger grass, Dog's tooth grass, Scutch grass.

Local Name : نجم ، نجيل بلدي ، نجيل ، نجير

Description : A common grass spread by stolons and rhizomes rooting from nodes and sending vertical shootings. Leaves blades flat lanceolate glabrous or distictously closed, involute firm, sheath densly hairy.

The plant is a common weed found in the cultivated areas.

Part Used : The entire plant and its juice.

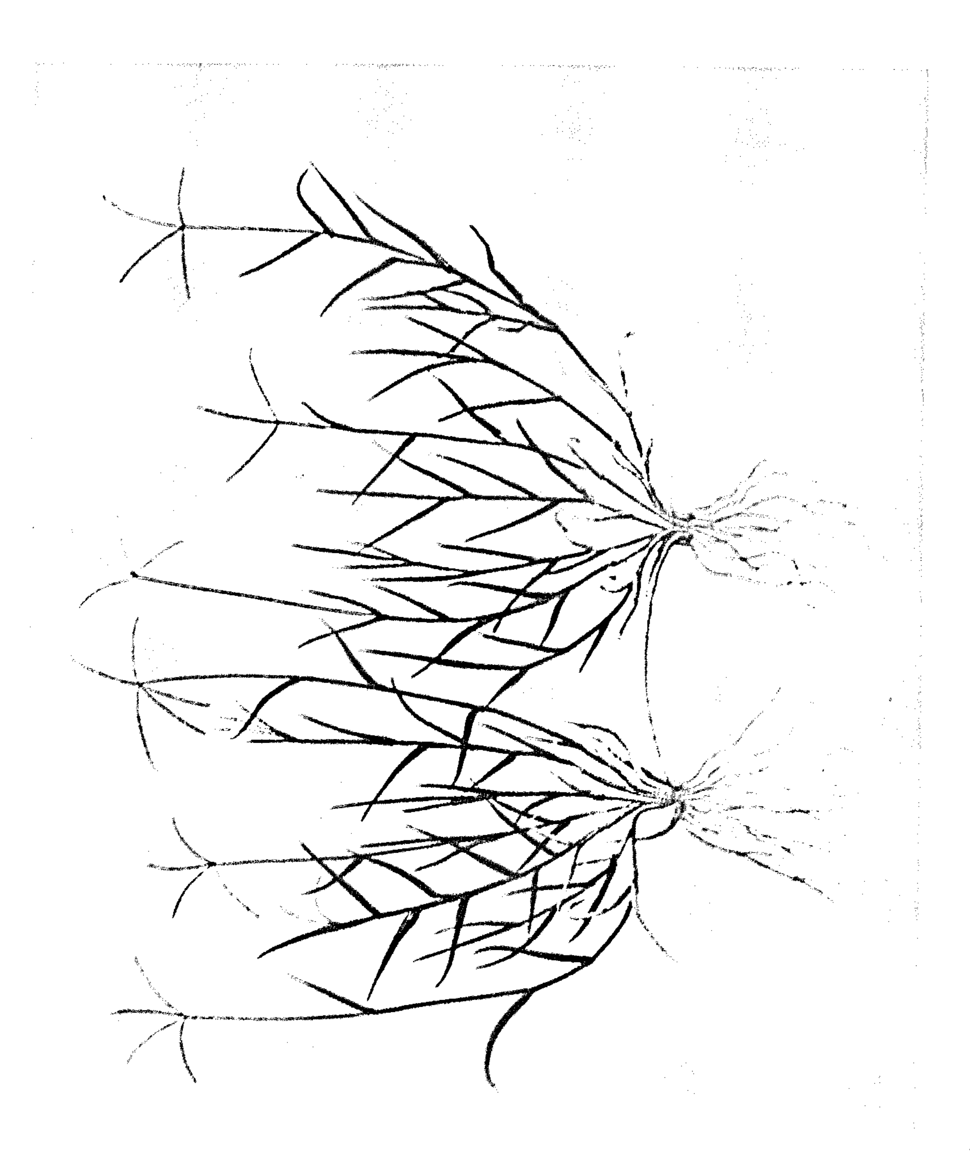
Principle constituents : The plant contains cynodin, saponin, triticin, mucilage, vitamin C and hydrocynic acid which is produced under certain conditions.

Cynodin is allied to asparagin.

Uses : Diuretic and astringent. It stops bleeding of cuts, wounds and piles. It is used in geneto -urinary disordres, ophthalmia and epilepsy.

The plant is toxic. Cattles feeded on the grass develop positerior paralysis due to the presence of hydrocyanic acid.

References : 1, 2, 3, 4, 7, 10, 12, 13, 14, 21, 22, 38.



(129) CYNOMORIUM COCCINEUM LINN.

CYNOMORIACEAE

English Name : Malta fungus, Maltese mushroom.

Local Name : ترتوت ، عاقول ، دهنان
مسرور

Description : The plant is fleshy leafless parasite with single stem 15 - 35 cm high.

Spike is crimson in colour broader than the stem with very minute flowers.

The plant is common in Tubrok, Nalut, Ghadames and Ghat.

Part Used : The entire plant.

Principle constituents : Not investigated.

Uses : It is used as laxative.

References : 1, 2, 3, 14.



(130) CYPERUS ESCULENTUS LINN.

CYPERACEAE

English Name : Earth almond, Edible cyperus, Yellow nutgrass.

Local Name : حب العزيز ، حب الزلم

Description : A perennial cultivated grass plant with small tubers at the end of some of the roots from which new plant grows. Flowers and fruits are in umbels at the end of a long stalk.

Part Used : Tubers.

Principle constituents : Tubers contain about 20 % of oil with pleasant taste and flavour.

They also contain sucrose.

Uses : Tubers are stimulant and aphrodisiac. Tubers and the flour made of them are of high caloric value, therefore they are good nutrient and tonic. An infusion is used to relieve toothache and is used as sedative. Roasted tubers are used as substitute for coffee and cacao.

References : 1, 3, 10, 13, 21, 22.



(131) CYPERUS ROTUNDUS LINN.
CYPERACEAE

English Name : Nut grass.

Local Name : سعد ، جعد ، سعد الحمار ، زبل المعيز

Description : A perennial herb with leaves sheathing at bases. Rhizome long black avoid - oblong tubers here and there. Inflorescence in yellow or reddish brown umbel of spicate spiklets.

The plant grows in cultivated areas.

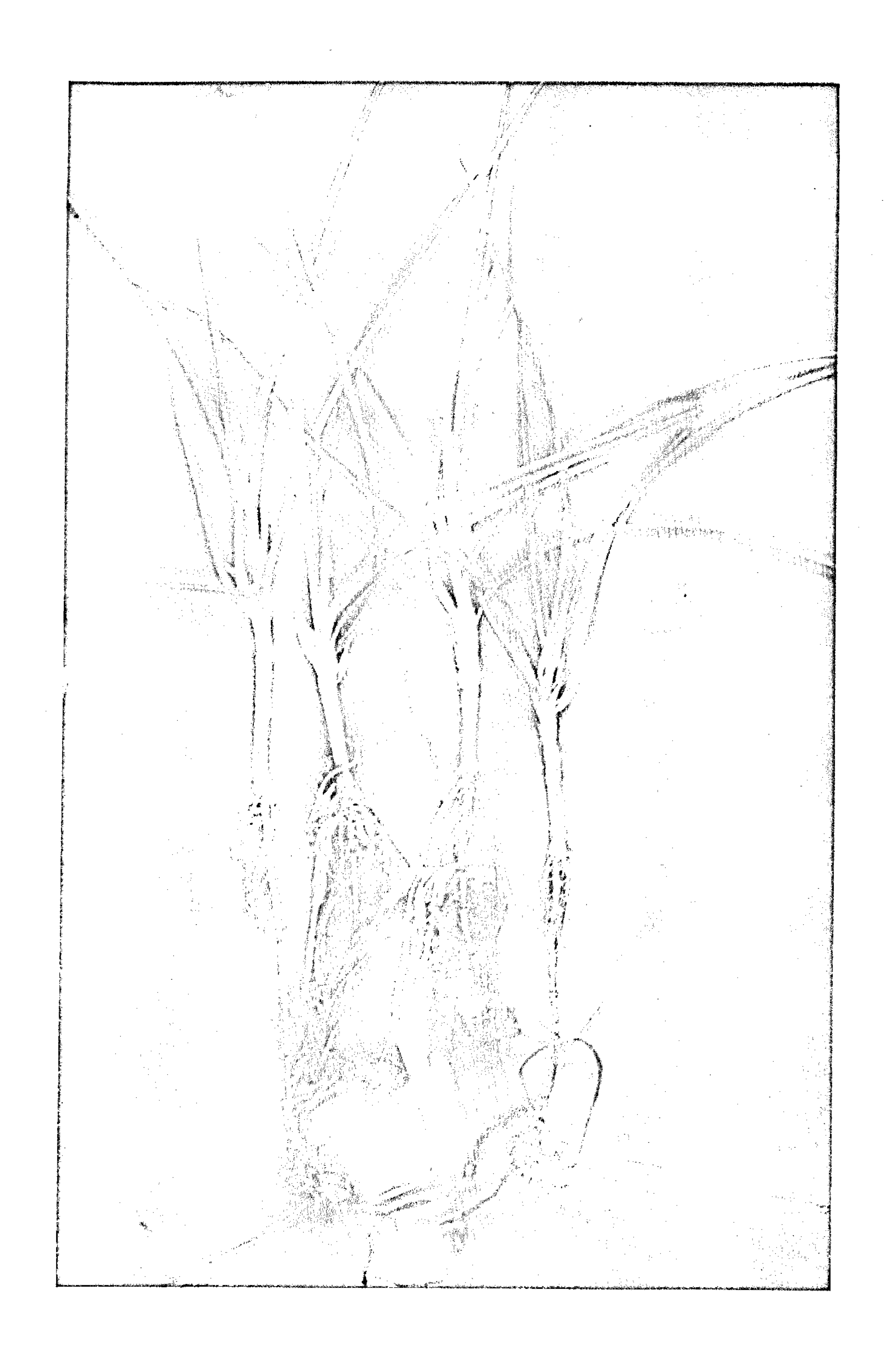
Part Used : Tubers.

Principle constituents : Tubers contain an unstable alkaloid, fixed oil about 2.7 % containing wax, glycerol, linolenic, linolic, oleic, myristic and stearic acids, volatile oil about 0.5 % containing about at least 27 componants comprising sesquiterpene hydrocarbons, sesquiterpene epoxides, sesquiterpene ketones, monoterpene and aliphatic alcohols one of them is known as iso - cyperol , pinene , cineole and alpha - cyperone $C_{15}H_{22}O$ Some of the new sesquiterpenoids reported are copadiene $C_{15}H_{22}O$ b. p. 130 - 140 C° and epoxyguaine $C_{15}H_{24}$ b. p. 102 - 104 C°.

Uses : Tubers are stimulant, tonic, demulcent, diuretic, anthelmintic, stomachic, carminative, diaphoretic, emmenagogue, astringent, vermifuge and antidysenteric. They dissolve lecithin and other amino acids - derivatives associated with the formation of urinary calculi.

The volatile oil has antibiotic properties.

References : 1, 3, 10, 21, 22.



(132) CYSTISUS SCOPARIUS LINK.
LEGUMINOSAE

English Name : Common broom, Scots broom, Broom tops, Scoparius.

Local Name : وزال

Description : A deciduous bush. Leaves small, lanceolate or trifoliate. Flowers large, golden- yellow. Pods are hairy on outside.

The plant was introduced into Libya.

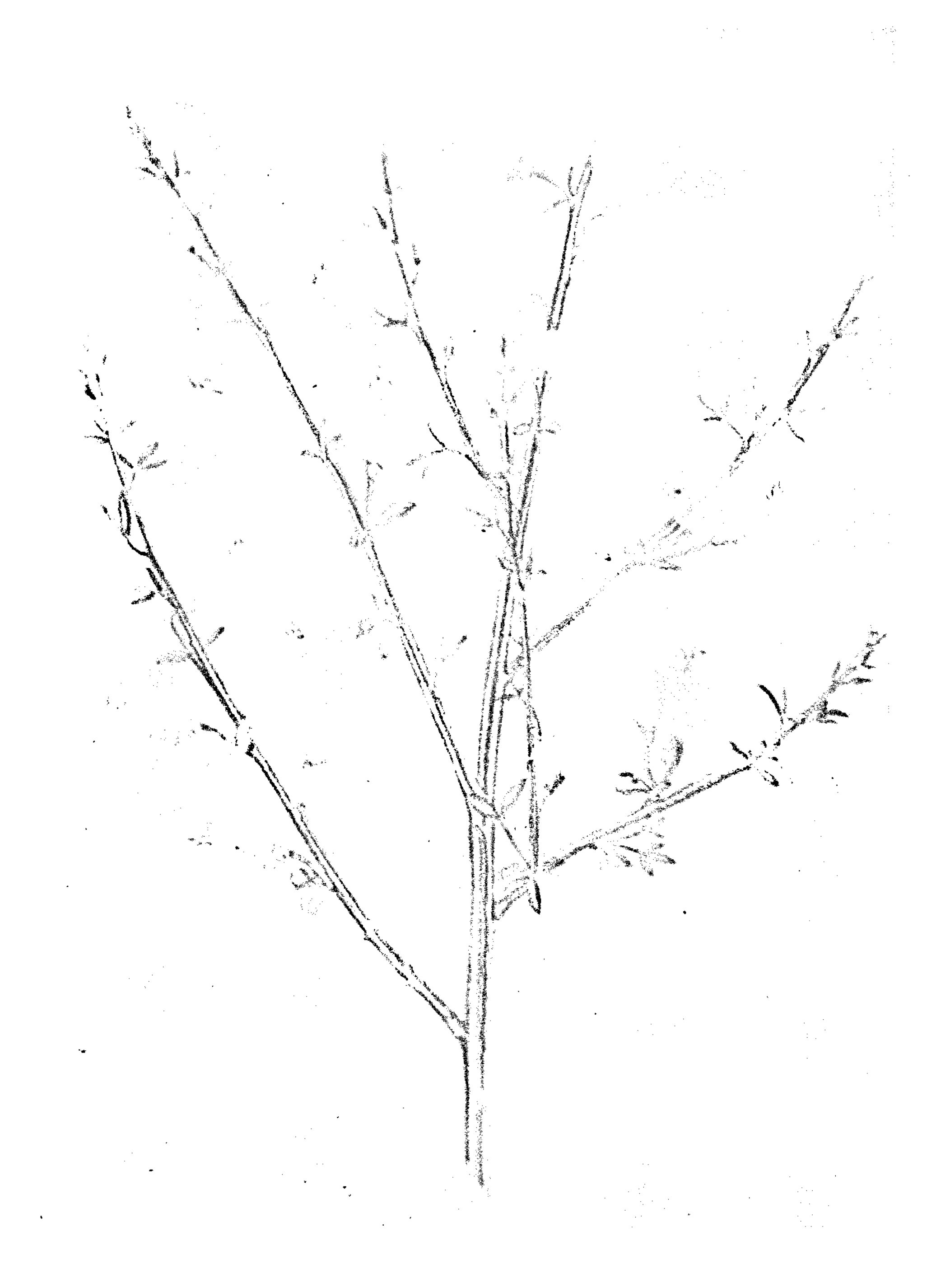
Part Used : Dried tops, grains and flowers.

Principle constituents : The grains contain the alkaloids sparteine, lupanine, hydroxylupanine, tyramine, hydroxytyramine, cytisine, genisteine and sarothamnine, flavonoids and some aromatic amines.

Leaves contain the phenolic compound scoparin.

Uses : The plant was used as cardiotonic. It is hypertensive, vasoconstrictor, diuretic, emetic and cathartic. It is now very rarely used medicinally. Sparteine is oxytocic and sparteine sulphate detoxifies snake venom when mixed with it. Green twigs before flowering in large dose is emetic and purgative.

References : 1, 3, 21.



(133) DATURA METEL LINN.
SOLANACEAE

English Name : Thorn apple, Ferox datura.

Local Name : داتوره ، بنج ، جوز مائل
كرسيف الشيطان

Description : Annual herb with unpleasant odour about 1 - 1.5 m high. Stem erect, hairy with white flowers.

The plant grows in waste areas in Tripoli and Benghazi, areas.

Part Used : The entire plant .

Principle constituents : It contains the solanaceous alkaloids, hyoscyamine, hyoscine and atropine and in addition it contains the alkaloid meteloidine which is characteristic of this species.

Seeds coantain allantoin.

Uses : Leaves boiled in oil is used in haemorrhoids and aqueous extract is used in eye diseases. Leaves are good antispasmodic.

References : 1, 2, 3, 10, 12, 13, 15, 17, 21, 25, 26, 27, 28.



(134) DATURA STRAMONIUM LINN.
SOLANACEAE

English Name : Thorn apple, Mad apple, Sramonium, Jimson weed.

Local Name : داتوره ، طاطوره ، نوار الفدى
نفير

Description : A robust annual herb about 30 - 100 cm high, emitting a disagreable odour. Leaves ovate dentate and lobed. Flowers solitary 6 - 10 cm in diameter, white and trumpet - shaped. Fruit spiny capsule opens upon ripening giving small black kidney - shaped seeds. The plant grows wildly in the waste areas in Tripoli, Benghazi and all over the Jamahiriya.

Part Used : Dried leaves, seeds, fruits and flowering tops.

Principle constituents : It contains the tropane alkaloids hyoscyamine, hyoscine (scopolamine) and small amounts of atropine, tannin, two neutral compounds datugen and datugenin. Roots contain ditigloyl and trihydroxytropane.

Uses : Atropine is mydriatic, antispasmodic and anticholinergic. It is used in some secondary glaucomas. Leaves are smoked as cigerettes to relieve asthma. Small doses are sedative and hypnotic. Pulverised seeds in fermented drinks lead to hallucination. Fruit juice is applied to the scalp to cure dundruff and falling hair. The plant is poisonous and used commercially for the production of atropine alkaloid.

References : 1, 2, 3, 4, 10, 11, 12, 13, 14, 20, 21, 24, 25, 26, 27, 28, 32, 33, 38, 40, 46, 54.



(135) DAUCUS CAROTA LINN.

Var. Boissieri Wild carrot. سفناري بري ، جزر بري

Var. Sativa Carrot. سفناري ، جزر

UMBELLIFERAE

Description : A biennial hairy plant 30 - 40 cm high. Leaves tripinnate. Inflorescence umbel with many primary rays. Fruit ovoid to oblong with spiny ribs alternative with hairy ribs.

The plant is cultivated as vegetable and also grows wildly.

Part Used : The whole herb.

Principle constituents : Fruits contain volatile oil containing alpha - pinene , two sesquiterpenes , bergamol b. p. 96 -8 C° and beta - bisabolene b. p. 129 -30 C° , carotal $C_{15}H_{26}$ b. p. 117 C° azaron m. p. 59 - 60 C° , phytosterin , enzymes , asparagin , lecithin , glutamin , pectin , vitamins A , B and C and carotene . Leaves contain two liquid alkaloids pyrrolidine $(CH_2)_4NH$ and daucine $C_{11}H_{18}N_2$ b. p. 240 - 50 C° . Herb contains a glycosidal bitter principle . Flowers contain rutin .

Uses : Seeds are carminative, stomachic, aphrodisiac and nerve tonic. Leaf oil produces contraction of uterus. Fruits are diuretic, carminative, emmenagogue, vermifuge and antisyphilitic. The plant shows hypoglycemic activity. Fruits are good nutrient for children and have skin forming property.It is used in case of infantile diarrhea.

The plant is used in urine retention and bladder infection.

References : 1, 3, 10, 12, 13, 14, 21, 22, 24, 32, 33, 38, 40.



(136) DELONIX REGIA RAF.
LEGUMINOSAE

English Name : Royal poinciana, Peacock flower.

Local Name : زهـــرة الجنــه

Description : An ornamental flowering tree. Leaves are twice compound 30 - 60 cm long, deciduous, fernlike and of fine texture. Flower bright scarlet and yellow. Fruit is a pod 60 cm long and 5 cm wide.

Part Used : Flowers.

Principle constituents : Lupeol and beta - sitosterol .

Uses : The flowers are anthelmintic.

References : 1, 3, 10, 12, 13.





(137) DELPHINIUM AJACIS LINN .
RANUNCULACEAE

English Name : Larkspur, Rocket larkspur.

Local Name : مهماز ، عايق ، لســان العصفــور

Description : An annual ornamental plant producing spikes of violet, pink, rose or blue flowers.

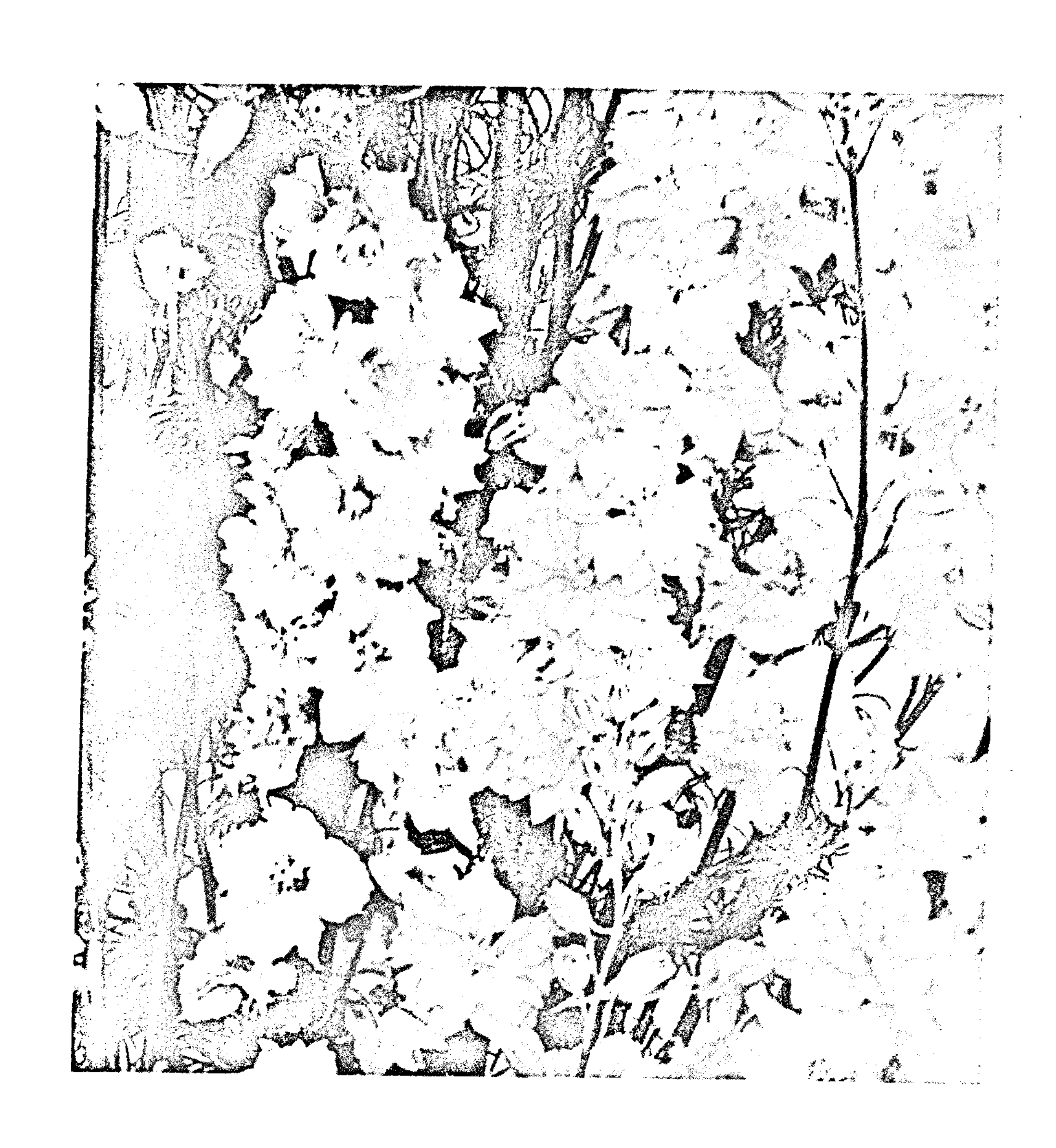
Part Used : Dried ripe seeds.

Principle constituents : Alkaloids ajacine $C_{34}H_{64}O_9N_2$ $2H_2O$ m. p. 154 C°, afaconine $C_{21}H_{31}O_3N$ m. p . 172 C° ajacinine , afacinoidine and other minor alkaloids . The seeds contain fixed oil .

Uses : The seed is the most poisonous part of the plant it destroys body parasites. The insecticidal or parasiticidal effects are due to the fixed oil. Externally it is used against lice in hair.

References : 1 , 3 , 10 , 12 , 24 , 27 , 28 .





(138) DIANTHUS CARYOPHYLLUS LINN.

CARYOPHYLLACEAE

English Name : Carnation, Picotee, Clove pink.

Local Name : قرنفـل بستانـي

Description : It is the well known carnation flowering plant, cultivated in the gardens for its colourful flowers of many colours.

Part Used : Flowers.

Principle constituents : Not investigated.

Uses : In spain and North America the flowers are considered cardiotonic, diaphoretic and antiseptic. In China the plant is used as vermifuge.

References : 1, 3, 21, 38.



(139) DIOSCOREA ALATA LINN.
DIOSCORACEAE

English Name : Dioscoria , Water yam .

Local Name : ديوسقوريا

Description : A twinning plant with very large tubers. Stem 4 - winged or angled. Leaves opposite, oblong or ovate, deeply heart - shaped at the base and glabrous. Staminate spikes branched, pistillate simple, flower distant. Fruit leathery capsule.

The plant was introduced from Brazil.

Part Used : Tubers and leaves.

Principle constituents : Starch, saponin and the steroidal compound diosgenin.

Uses : The leaf juice is applied to scorpion stings. Diosgenin is used as a starting material for the commercial production of sex hormones and cortisone. The fresh tubers produce narcosis but when boiled or roasted they can be eaten safely.

References : 1, 3, 10, 13, 21, 22.



(140) DIOSCOREA BULBIFERA LINN.
DIOSCORACEAE

English Name : Japanese yam, Air potato.

Local Name : ديوسقوريا ، أغنام

Description : A twining vine bearing tubers, nearly 30 cm long in the leaf axiles. Leaves alternate, ovate and heart - shaped at the base, underground tubers are either small or missing.

The plant was introduced into Tripoli.

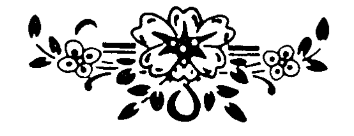
Part Used : Tubers.

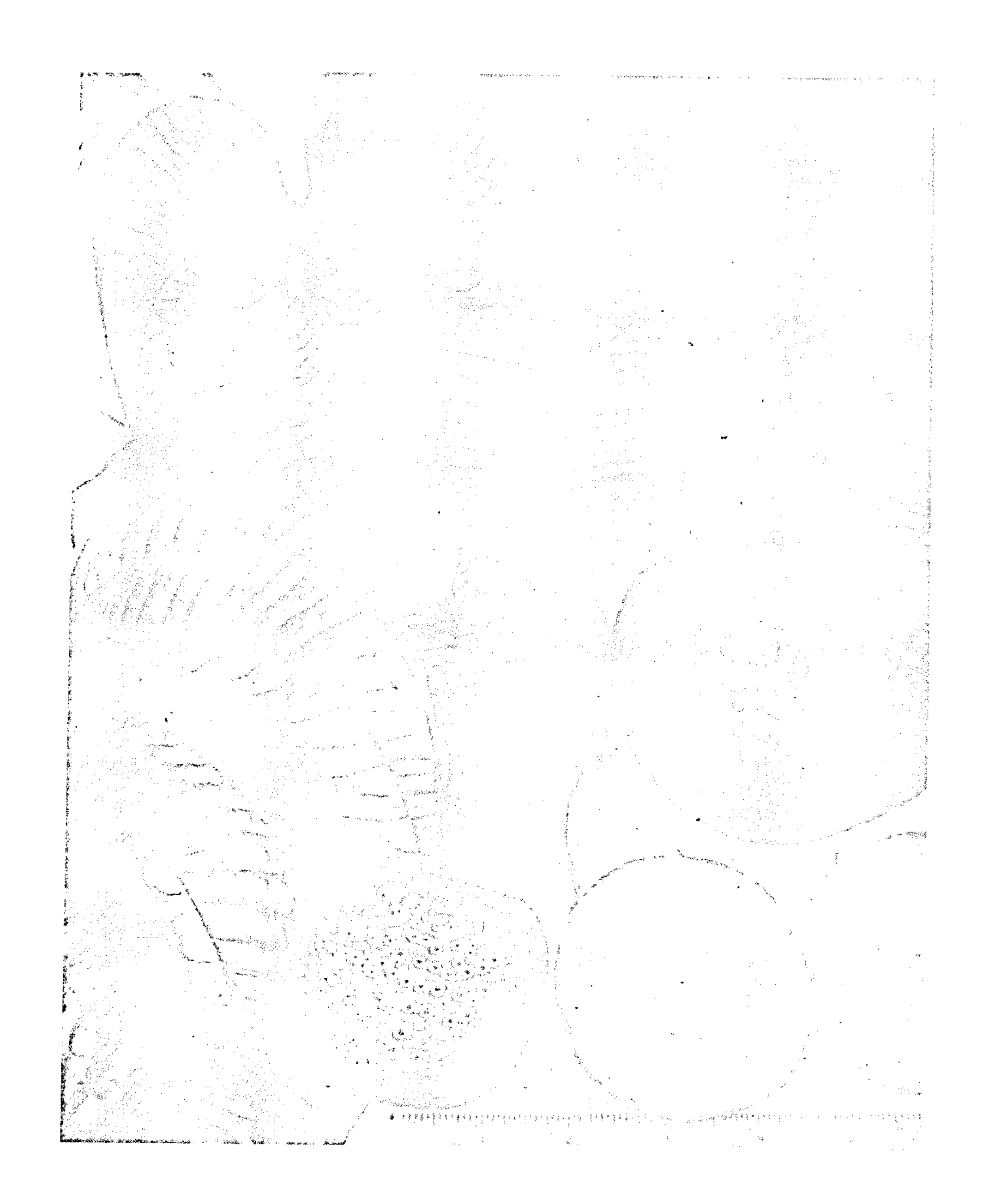
Principle constituents : The tubers contain rubber, tannin, saponin and the toxic compound dioscorine.

Uses : Tubers are inedible and very acrid when fresh but boiling makes them edible.

They are used in India for treating syphilis, diarrhea, dysentery, haemorrhoids, ulcers and as fish poison.

References : 1, 3, 9, 12, 13, 21.





(141) DIOSPYROS KAKI LINN.
EBENACEAE

English Name : Japanese date palm, Kaki, Persimmon

Local Name : لوتس ، كاكي

Description : A cultivated deciduous tree with glabrous branches. Flower dioecious, yellowish white. Fruit flattened to conical usually ribbed at the base, orange - yellow to reddish.

The tree was introduced into Tripoli and Benghazi.

Part Used : Seeds and fruits.

Principle constituents : The plant contains tannins, hydroxynaphthaquinone, diosquinone, diospyrine and diospyrole.

Uses : Roasted seeds are used as substitute for coffe. Calyx and peduncle of fruit are emetic and used in the treatment of coughs and dysponea. Externally the plant is used for skin diseases as antimicrobial. It is also used as insecticide.

References : 1, 3, 13, 21, 39.



(142) DODONAEA VISCOSA LINN.
SAPINDACEAE

English Name : Native hops.

Local Name : دودونيا

Description : A shrub about 3 m high branching from the base. Leaves subsessile oblanceolate tapering at the base. Inflorescence terminal panicles and racemes. Flowers cream.

The plant was introduced from Kuwait.

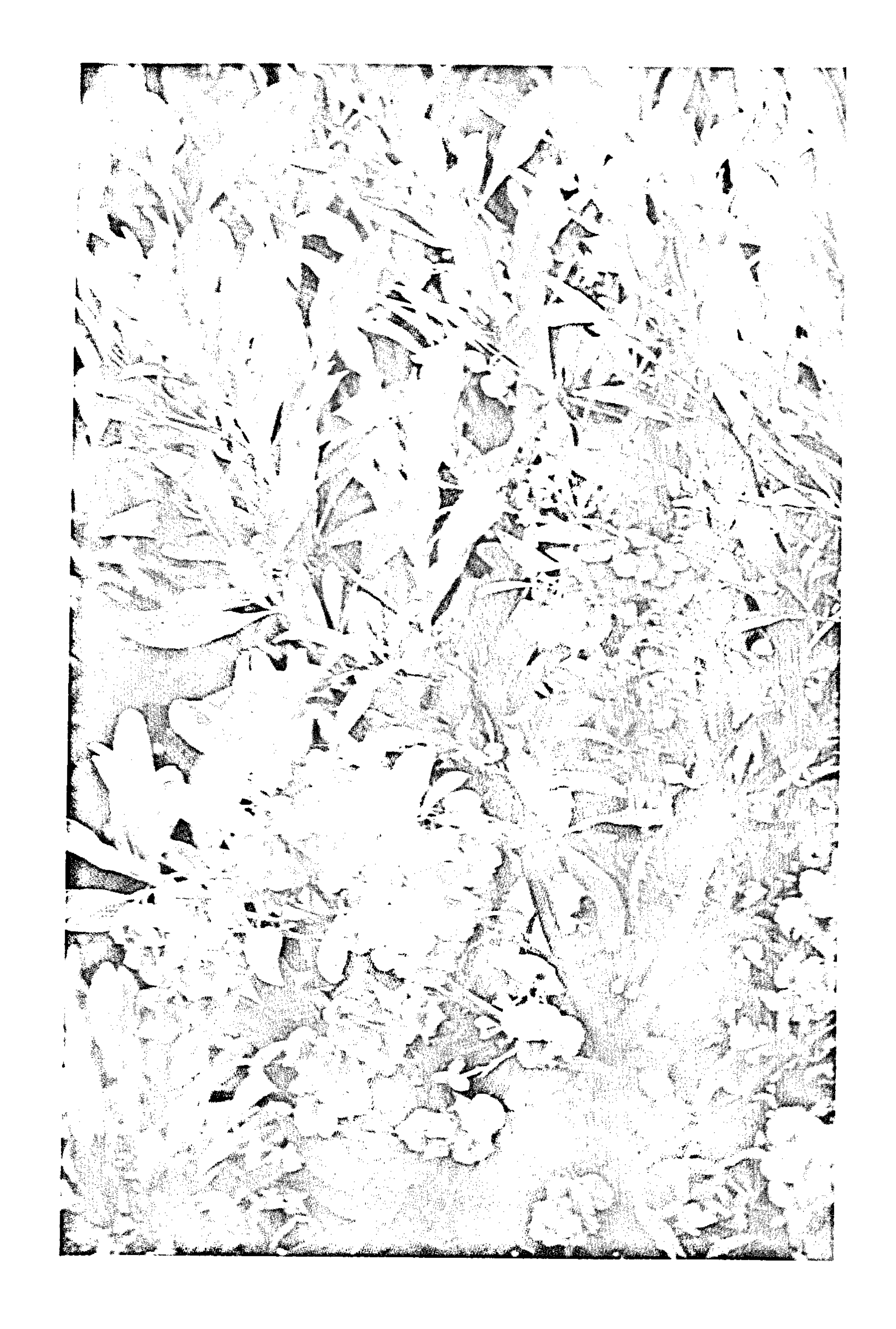
Part Used : Leaves and bark.

Principle constituents : The plant contains saponins, sterols, tannins, alkaloids, glycosides and flavonoids.

Seeds contain the compound dodonin about 3.5 %, hentriacontaine $C_{31}H_{64}$ m. p. 68 C° and hautriwaic acid $C_{20}H_{28}O_4$ m. p. 182 . C° .

Uses : Leaves are diaphoretic, astringent, slightly anaesthetic, reduces body temperature and used in cases of gout and rheumatism. Externally they are applied to wounds, swellings, burns and some skin disorders. The bark is astringent, used as baths and fomentations. Leaves are chewed as stimulant. Roasted cut twigs are used as tooth brush.

References : 1, 3, 10, 14, 21, 22.



(143) DOLICHOS LABLAB LINN.
LEGUMINOSAE

English Name : Hyacinth beans, Lablab beans.

Local Name : لبلاب ، لوبيه

Description : An annual or perennial glabrous climbing plant slightly hairy 1.5 - 3 m. long. Leaflets broad - ovate, inflorescence elongated raceme. Flower purple and white. Fruit is a flat pod papery, straight and curved. The plant is cultivated as ornamental.

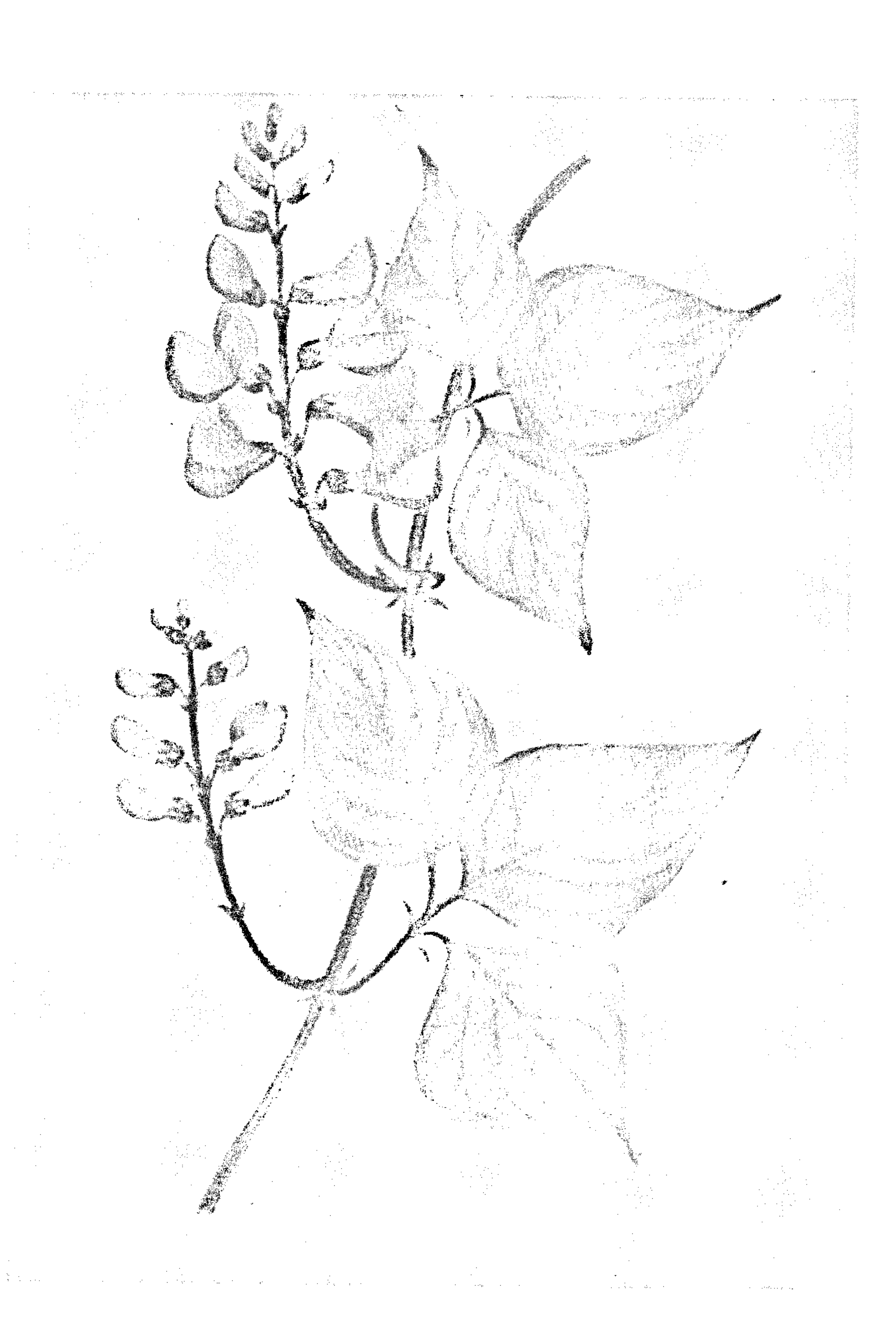
Part Used : Ripe seeds and leaves.

Principle constituents : Glycosides dolichosin and globulin, nicotinic acid, saponins, vitamin C and iron. It is reported to contain cyanogenetic glycosides.

Uses : Seeds are edible after boiling to destroy the toxic glycosides. They are antipyretic, stomachic, antispasmodic and aphrodisiac. They are also used for menopouse and chest diseases. Leaves are applied as poultice to snake bite. Roots are poisonous.

References : 1, 3, 10, 13, 14, 21, 22, 24, 57.





(144) DURANTA REPENS LINN.
VERBENACEAE

English Name : Golden dew drop, Pigeon berry.

Local Name : دورانتا ، بنفسج افرنجي

Description : An ornamental cultivated spiny shrub. Leaves are opposite and twigs are 4 - angled. Flowers in racemes about 15 cm long with different colours. Fruit borne in golden yellow cluster. It is cultivated as hedge plant .

Part Used : Whole plant.

Principle constituents : The plant contains saponins. The fruit contains an alkaloid similar to narcotine.

Uses : The leaf in the form of infusion is diuretic. The fruit is antipyretic and the flower is stimulant. Macerated fruits yield juice which even in dilution of 1 to 100 parts of water is lethal to mosquito larvae. The juice can be used as larvicide in bonds and swamps. The plant is toxic, it causes dilatation of the pupil of the eye , swelling of lips and eye lids , sleep , fever , rapid pulse and convulsions .

References : 1, 3, 10, 12, 21.



(145) ECBALLIUM ELATERIUM LINN.
CUCURBITACEAE

English Name : Squirting cucumber, Wild cucumber.

Local Name : بلحة الصفير ، بزيق ، بلحه جحا ، قثاء جحا
تفاحة جحا ، قثاء الحمير

Description : A prostrate perennial fleshy herb 60 cm high without tendrils. Leaves petioled triangular cordate or subtriangular. Flower yellow in racemes. Fruit echinate, oblong containing juice and squirting out the seeds from aperture at the base .

The plant grows in Homs.

Part Used : The fresh fruit juice.

Principle constituents : The plant contains the resinous compounds alpha and beta elaterins , cucurbitacins , ecballin , prophetin and ecbalic acid . It contains unknown alkaloid . The fresh fruits contain the highest percentage of cucurbitacins while leaves and flowers contain the lowest percentage .

Uses : The fresh fruit juice dropped in the nose relieves jaundice. It is effective in cases of parasitic scalp diseases. It promotes hair growth in cases of baldness.

The plant is a powerful hydragogue purgative. The elaterins which are the active principles have antitumer effect.

References : 1, 2, 3, 21, 22, 25, 30, 33, 34.



(146) ECHIUM SERICEUM VAHL .

BORAGINACEAE

English Name : Silky viper's tongue.

Local Name : حنه العقرب ، ساق الحمام

Description : Coarse annual or biennial herb or small shrub with hairy alternate simple leaves. Flower showy blue and red.

The plant grows in Benghazi, Ajdebia , Shahat , Derna and Tarhuna .

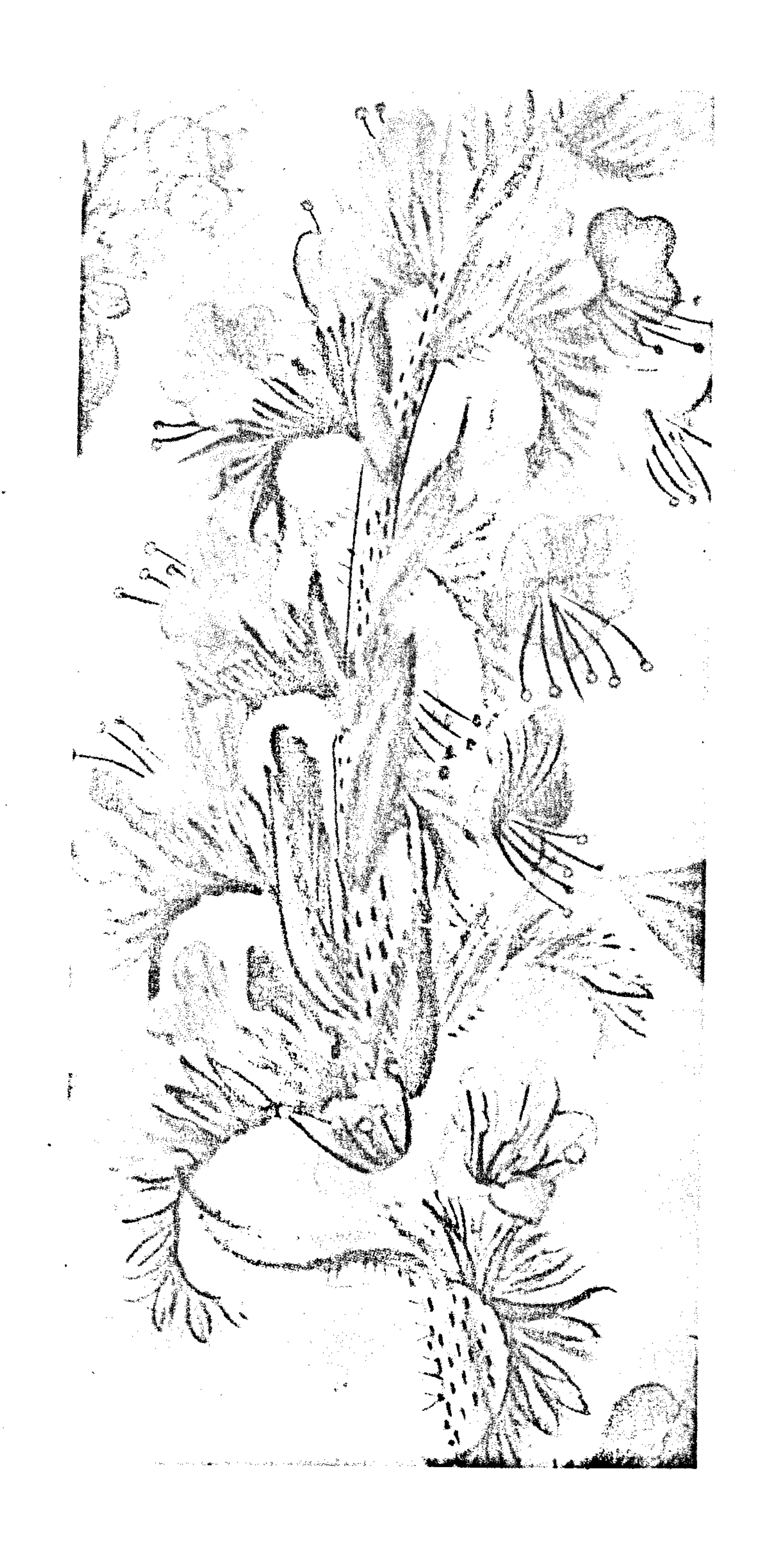
Part Used : The entire plant.

Principle constituents : The alkaloids echinatine, echimidine and other minor alkaloids.

Uses : The alkaloids have cancer inhibiting activity.

References : 1, 2, 3, 11.





(147) ELAEAGNUS ANGUSTIFOLIA LINN .

ELAEAGNACEAE

English Name : Zakkoum - oil plant, Oleaster.

Local Name : زقوم ، زيزفون ، ضرع الكلب ، بل
مكة

Description : A big ornamental tree with greyish - green foliage with crooked trunk having shredding bark. Leaves narrow 3 - 8 cm long grey - green. Flower small almost inconspicuous and yellow. Fruit is a small yellow berry coated with silvery scales.

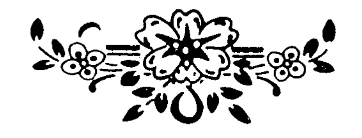
Part Used : Seed oil, flower juice and bark.

Principle constituents : Bark contains the alkaloid eleagnine and another viscous oily alkaloid. The plant contains volatile oil and carbohydrates.

Uses : Oil obtained from seeds mixed with syrup is used as an electuary in treating catarrh and bronchial asthma.

Juice from flowers is used in malignant fever. Fruits are considered good source for the production of alcohol.

References : 1, 3, 21, 24.



(148) ELEUSINE CORACANA . GAER AND ASCH.

GRAMINEA

English Name : Ragi , Raggee corn , African millet , Coracan millet .

Local Name : رجى ، بشنه ، كنب

Description : An annual weed grass. Leaves upto 30 cm long and 1 cm wide. Spikes thick and heavy turns brown at maturity.

The plant occurs in Derna, Kufra, Tajora and Misurata.

Part Used : Seeds, leaves and flowers.

Principle constituents : Vitamins. germinated grains contain amylase.

Uses : Seeds are tonic, cooling and astringent. They are used in preparing fermented beverages. Leaf juice is given to women in child birth. It is diaphoretic, vermifuge and used in liver diseases. The flower is used in chest conditions.

The plant is also used in case of leprosy.

References : 1, 3, 10, 13, 21.



(149) EPHEDRA ALATA DECNE .
GNETACEAE

English Name : Horse tail.

Local Name : علندي ، علد

Description : A climbing shrub, densely covered with red fleshy berries. Branches long and tortuous. Leaves opposite. Flowers in small spikes. The plant is common in Tarhuna and Benghazi.

Part Used : The entire herb.

Principle constituents : The plant contains the amine alkaloids ephedrine and pseudo - ephedrine .

Uses : Ephedrine is a bronchodilator, causes mydriasis and rises blood pressure.

It is used in bronchial asthma.

References : 1, 2, 3, 7, 11, 12, 13, 27, 28, 33.



(150) EPILOBIUM HIRSUTUM LINN.
ONAGRACEAE

English Name : Willow herb, Codlins and cream.

Local Name : فرفور ، رأس الجاموس ، عقيص

Description : Herbaceous perennial plant with straight stem, in cultivated plants, it may be branching. Leaves opposite, simple lanceolate. Flower, showy, purple and irregular about 3 cm in diameter in leafy raceme. The plant grows in Gubba and Wadi Derna.

Part Used : Sap and leaf secreation.

Principle constituents : Leaves secrete malic acid.

Uses : The herb is poisonous, it causes epileptiform convulsions.

The sap of the herb is used as an application for warts. Leaves are active against staphylococcus aureus.

The plant is used as charm against ghosts and poisonous animals.

References : 1, 3, 10, 21.



(151) EQUISETUM MAXIMUM LAM .
EQUISETACEAE

English Name : Great horse tail

Local Name : سرخس

Description : A leafless plant with brushlike hollow jointed stems from running root - stocks, terminated by a cone or spike which is composed of shieldshaped stalked scales bearing the spore - cases beneath. The plant occurs in Wadi Derna.

Part Used : The plant is toxic.

Principle constituents : Flavonoids, alkaloids, phenolic acids and flavanol glycosides.

Uses : The plant is toxic and therefore it is not used medicinally.

References : 1, 3, 21, 25, 50, 57.



(152) ERIGERON CANADENSIS LINN .
COMPOSITAE

English Name : Hog weed, Horse weed, Bitter weed, Fleabane, Canadian fleabane.

Local Name : حشيشة الجبل

Description : An annual plant with erect stem. Leaves are numerous lanceolate and narrow. Flower - heads in a branched inflorescence. The ray florets are creamy - white and the disc florets are yellow.

The plant is common in Tripoli.

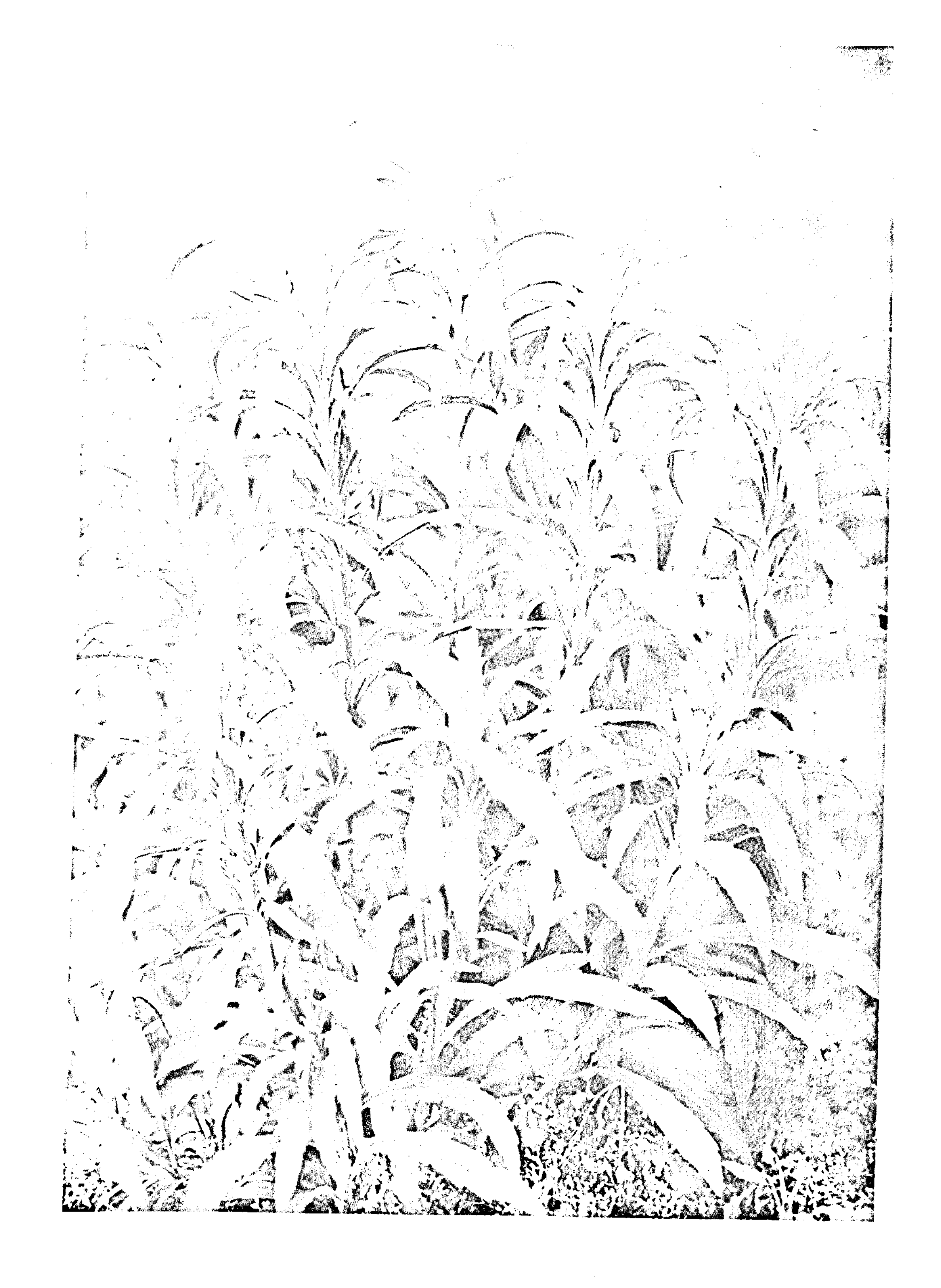
Part Used : Roots, leaves and flowering tops.

Principle constituents : It contains flavones, tannins and volatile oil containing limonene, dipentene and terpeneol.

Uses : Leaves and tops are used to cure urogenital diseases, leaf decoction is good for sore throat, ringworms and eczyma. The plant has hypoglycemic activity. Root extract is used to treat vaginal discharges (leukorrhea). Powdered seeds are aromatic, flea - repellant, haemostatic and antidiarrheal. It causes contact dermatitis.

The oil is used in diarrhea, dysentery, internal haemorrhage, bronchial catarrh and cystitis.

References : 1, 3, 10, 12, 21, 22, 40.



(153) ERIOBOTRYA JAPONICA LINDL .
ROSACEAE

English Name : Loquat, Japan - medlar.

Local Name : ناسبولي ، بشملة

Description : An evergreen tree about 5 m high, cultivated for the production of the edible fruit. Leaves woolly, long lanceolate 15 - 25 cm long . Flower fragrant yellowish - white. Fruit edible, pear - shaped, orange - yellow with large and very few woody seeds.

Part Used : Leaves and fruits.

Principle constituents : Ripe fruit contains sucrose and malic acid. Amygdalin glycoside occurs in the pericarp of the unripe fruit and in the seeds.

Leaf contains saponins, ursolic acid, tannins and vitamins B and C.

Uses : Leaf decoction is very effective in cases of urinary calculi. It is also used in cases of diabetes, rheumatism and cough.

Fruit is edible, it is considered sedative and allays vomiting, nausea and thirst.

Flowers are expectorant.

Reference : 1, 3, 10, 21, 22.



(154) ERODIUM CICUTARIUM LINN.

GERANIACEAE

English Name : Hemlock, Geranium stork's bill, Pin grass.

Local Name : ابرة العجوز ، خلال الغوله ، غربـل

Description : An annual weed, sometimes growing as biennial. Prostrate stem appears as a lawn. Leaves compound, alternate, pinnate, in rosettes at the base of the plant. Flower purple in umbel. The plant is a common weed in Tripoli and Benghazi areas.

Part Used : The entire herb .

Principle constituents : Caffeine, tyramine, gallic acid, glutamic acid, choline, saponins, flavonoids and sugars. Two unidentified compounds have been isolated, having m. p. 87 - 90 C° and 215 C° .

Uses : Oxytocic and astringent, therefore it is used to stop haemorrhage and produce contraction of the uterus and in cases of dysentery.

References : 1, 2, 3, 10, 21, 33, 38.

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(155) ERODIUM GLAUCOPHYLLUM LINN .

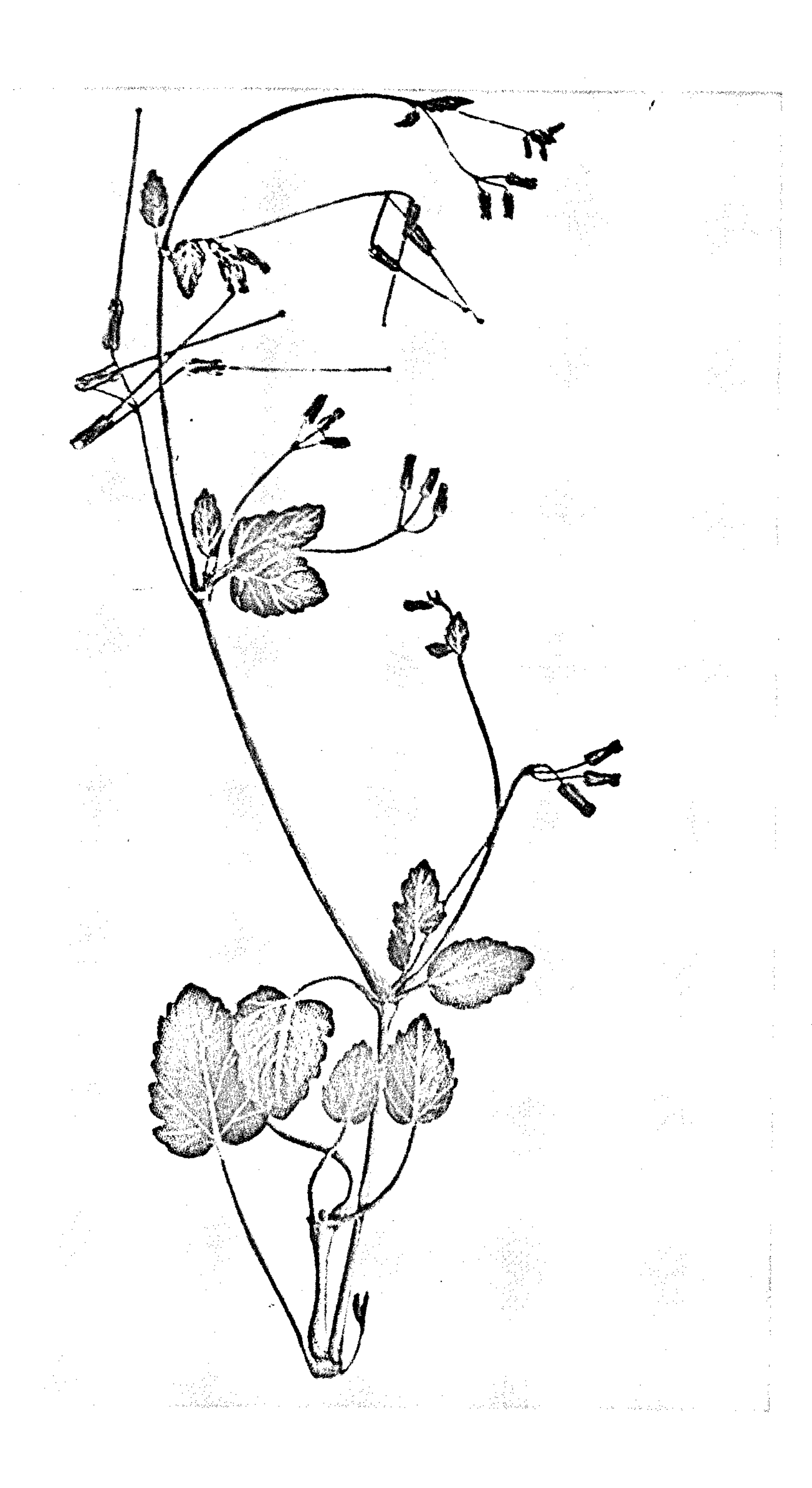
GERANIACEAE

English Name : Stork's bill, Glaucous leaved stork's bill.

Local Name : رجمه ، دهمه ، تمر ، مرار

The plant is almost similar to Erodium cicutarium in constituents and uses.

References : 1, 2, 3, 7, 32.



(156) ERODIUM MOSCHATUM L'HER.

GERANIACEAE

English Name: Musky stork's bill, Ground needle.

Local Name : مسيكه ، مسيخه

Description : A roodside weed annual or biennial. Prostrate stem similar to Erodium cicutarium with a pink to purple flower.

The plant is very common as a weed in the cultivated areas and on the roadside all over the Jamahiriya.

Part Used : Entire plant.

Principle constituents : Not investigated. The whole plant has a musk odour.

Uses : It is astringent, diuretic, diaphoretic, oxytocic and promotes healing of wounds. It is used in the treatment of dysentery.

References : 1, 2, 3, 10, 12, 21, 38.



(157) ERUCA SATIVA MILL.
CRUCIFERAE

English Name : Rocket, Roquette, Garden Rocket.

Local Name : جرجير ، حاره

Description : An annual or biennial cultivated edible herb 20 - 30 cm high, erect, branching from the base. Leaves young pepery. Flowers whitish with purple veins about 3 cm in diameter.

The plant is cultivated as vegetable.

Part Used : Seeds and leaves

Principle constituents : Seeds and leaves contain thioglycosides , a phytosterol m. p. 136 -37 C° and an alkaloid . Leaves contain volatile oil .

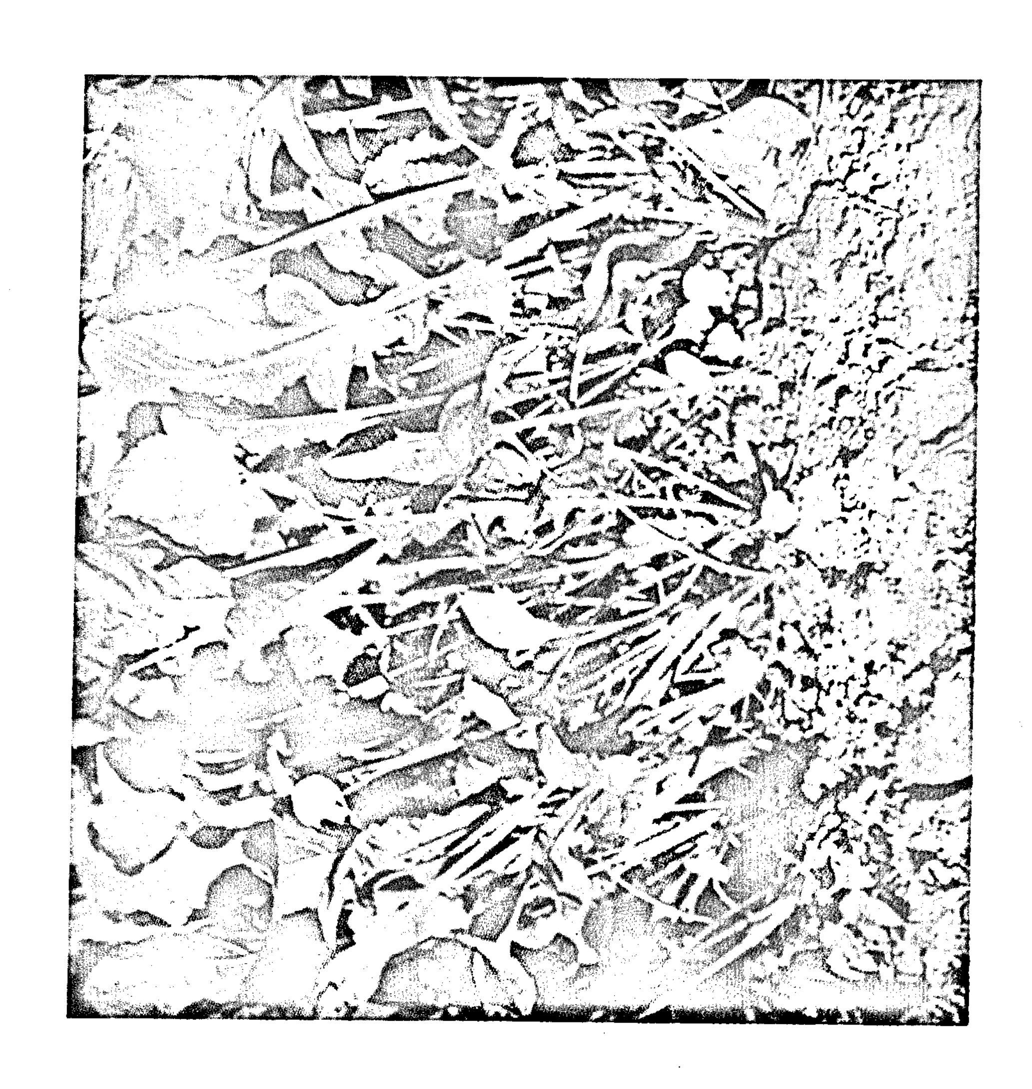
Uses : Seeds are acrid like mustard. Leaves are stimulant, stomachic, diuretic, antiscorbutic, general tonic and aphrodisiac.

The oil is antibacterial.

Leaves are used as salad.

References : 1, 2, 3, 13, 21, 57.





(158) ERVUM LENS LINN.
LENS ESCULENTA MUENCH.
LEGUMINOSAE

English Name : Lentil.

Local Name : عدس

Description : An erect annual small plant 60 - 100 cm high cultivated as a field crop for the production of the edible nutritious seeds. Leaves tendril, leaflets 5 - 6 pairs, pubescent. Flowers small white, violet or pale blue. There are several varieties.

Part Used : Seeds.

Principle constituents : Seeds are very rich with protein. They contain fat, mucilage and iron.

Uses : Seeds are mucilaginous, mild laxative, useful in cases of constipation and other intestinal infections. Seeds are very good in cases of anemia.

References : 1, 3, 41.



(159) ERYNGIUM CAMPESTRE LINN.

UMBELLIFERAE

English Name : Field eryngo, Snake - root, Watling street - thistle.

Local Name : شقاقيل ، فقيع

Description : A perennial herb 40 - 60 cm high having a thin stem with rigid branches. Leaves are thick, coriaceous, spiny, blue - green or sometimes yellow green. Flowers are blue in colour occuring as rounded flower heads. The herb is common in Benghazi area.

Part Used : Roots.

Principle constituents : The roots contain saponins.

Uses : The root extract was used to treat diseases of the bladder and uterine irritation. It is used as aphrodisiac and diuretic.

References : 1, 2, 3, 13, 21, 22, 40.



(160) ERYTHRAEA CENTAURIUM PERS.
CENTAURIUM MINUS MOENCH.
GENTIANACEAE

English Name : Lesser centaury,Common centaury.

Local Name : قنطريون ، مرارة الحنش

Description : A variable annual or biennial 10 - 25 cm high. Leaves simple, sessile, opposite, oval in the form of rosette at the base. Flower pink in colour. The plant occurs in Ain zara in Tripoli.

Part Used : Leaves, stems and flowers.

Principle constituents : The plant contains the alkaloids erythricine and gentianine, which have curare like action, several bitter compounds as gentiopicrin and erythrocentaurin which is a lactone.

Uses : It is used externally in the treatment of wounds and ulcers. Internally it is tonic, stomachic and antidiarrheal.

The bark is a fish poison. The alkaloids are not used medicinally.

The plant is toxic.

References : 1, 10, 21, 22, 28, 33, 38, 40.



(161) EUCALYPTUS CAMALDULENTIS DEHN.
MYRTACEAE

English Name : Murray red gum, Blue gum, Red gum tree.

Local Name : كينا ، سرويل
كافور

Description : A high tree with grey decidous bark and narrow lanceolate leaves. Flowers 4 - 8 together in stalked umbel. Fruit capsule nearly glabrous.

The plant was introduced and cultivated in Tripoli.

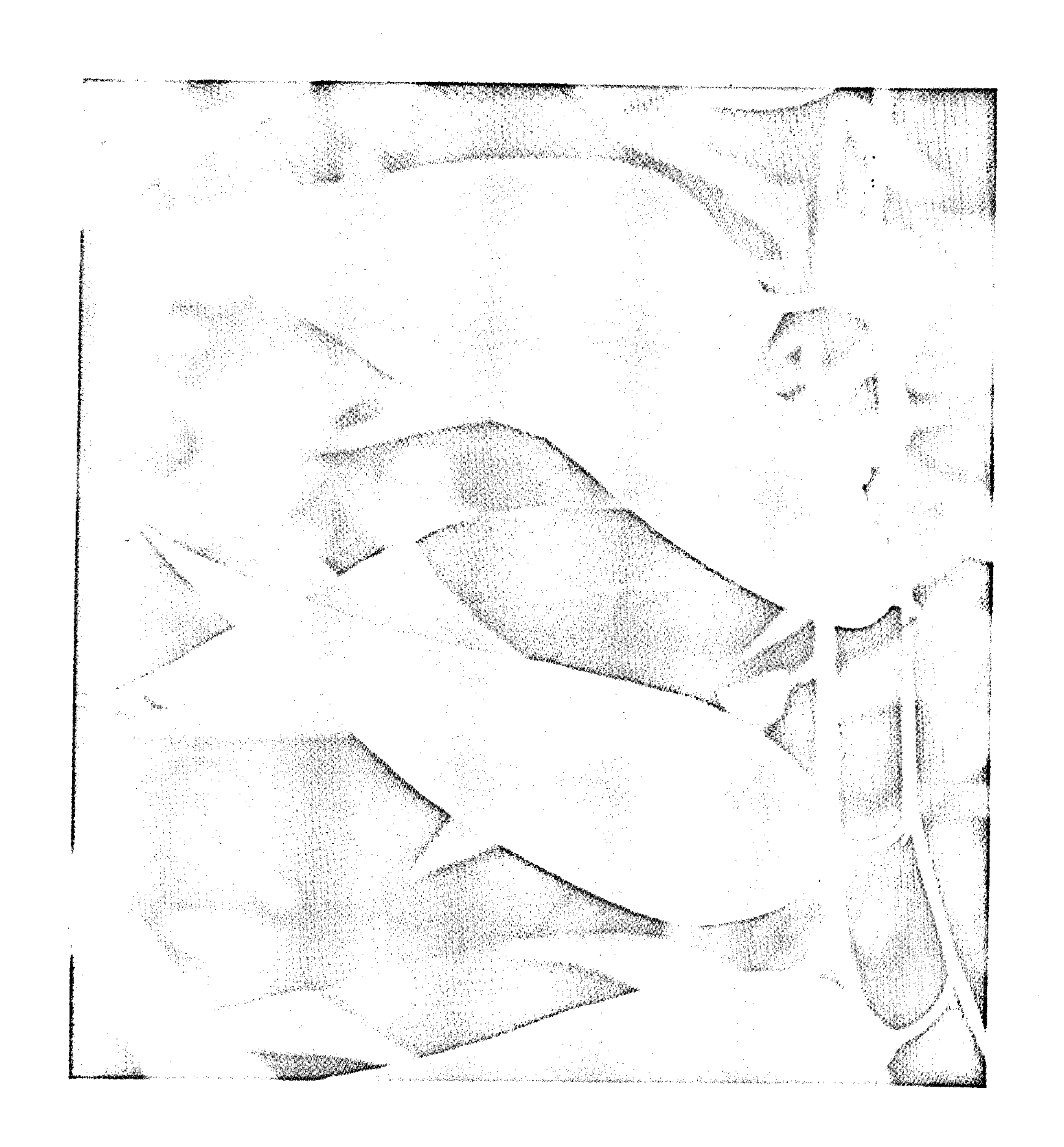
Part Used : Juice, dry gummy exudate known as eucalyptus gum or red gum.

Principle constituents : Tannins mostly kino tannic acid, kinoin, kino red, catechin and pyrocatechin.

Uses : The drug is used as astringent in diarrhea, and dysentery. It is used as lozenges for sore throat and pharyngitis. It is also used as antispasmodic and anaethetic.

References : 1, 3, 10, 12, 14, 21, 25, 26.





(162) EUCALYPTUS GLOBULUS LABILL.
MYRTACEAE

English Name : Tasmanian blue gum tree, Australian fever tree.

Local Name : كينا ، سرويل
كافور

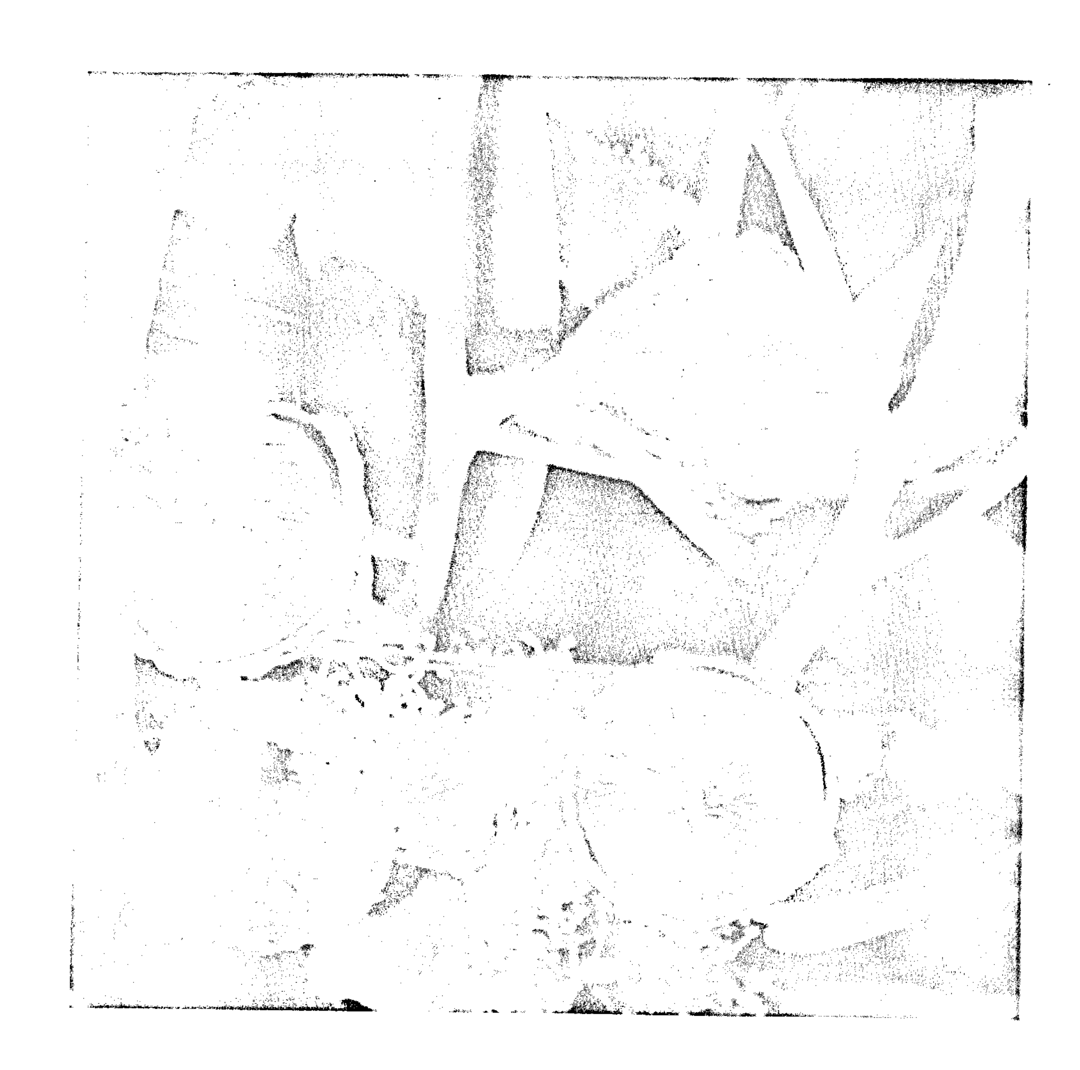
Description : A very large ornamental tree grows up to 40 m. high with smooth bark. Leaves alternate, petiolate with a pleasant odour. Toung leaves are shiny pale opposite and sessile.

Part Used : Fresh leaves, terminal branches, volatile oil from the leaves and gum from the stem.

Principle constituents : Leaves contain tannin, flavonoid pigments, eucalyptin, volatile oil containing cineole known as eucalyptole, geraniol, alpha - pinene, terpineol, lemonene, phellendrene, cymene and piperitone.

Uses : The oil is diaphoretic, expectorant and antiseptic to the respiratory tract, having antibiotic activity. It stops the bronchitic mucosal secreation. Mixed with olive oil it is used for rheumatism and as ointment for burns. The oil is mosquito - repellant. Leaves are expectorant, carminative and increase the flow of saliva, gastric and intestinal juices. They are used in the form of cigarettes, infusion or tincture in the treatment of respiratory infections. Oil is toxic and narcotic poison.

References : 1, 3, 10, 12, 13, 21, 22, 25, 26, 38, 40, 43, 54.



(163) EUPHORBIA PEPLUS LINN .
EUPHORBIACEAE

English Name : Purple spurge, Hyssop spurge.

Local Name : فرفخ ، لبينه ، ودينه

Description : An annual ornamental plant 20 -30 cm high, glabrous, erect, richly branched with milky juice. Leaves tender, entire 0.5 - 2.5 cm long. Flower cup - shaped.

Part Used : Leaves.

Principle constituents : Leaves contain latex containing oleo -resin rich in euphorbone, saponins and the flavonoids quercetin, kaempherol, rhamnetin in the free form or as glycosides. They conatin also N - alkane , aliphatic alcohol , beta - sitosterol , stigmasterol , campasterol , cholesterol , the triterpenoids cycloartenol , taraxerol , ursolic acid and uvaol .

Leaves contain unknown alkaloids 0.3 %.

Uses : Leaves are diuretic. It is used in asthma and hepatic disorders. Boiled leaves are used as a bath for skin troubles.

The glycosides are toxic.

References : 1, 2, 3, 4, 11, 12, 16, 21, 40.





(164) EUPHORBIA PULCHERRIMA WILLD.
EUPHORBIACEAE

English Name : Wildenow, Easter flower, Flame leaf, Christmas flower, Lobster flower.

Local Name : بنت القنصل

Description : A well grown evergreen perennial shrub about 3 m high, cultivated as a garden plant. Leaves coarse produced on stiffy upright cones. The sap is milky white. Flower, small insignificant yellow surrounded with bright red bracts the whole appearing like one flower.

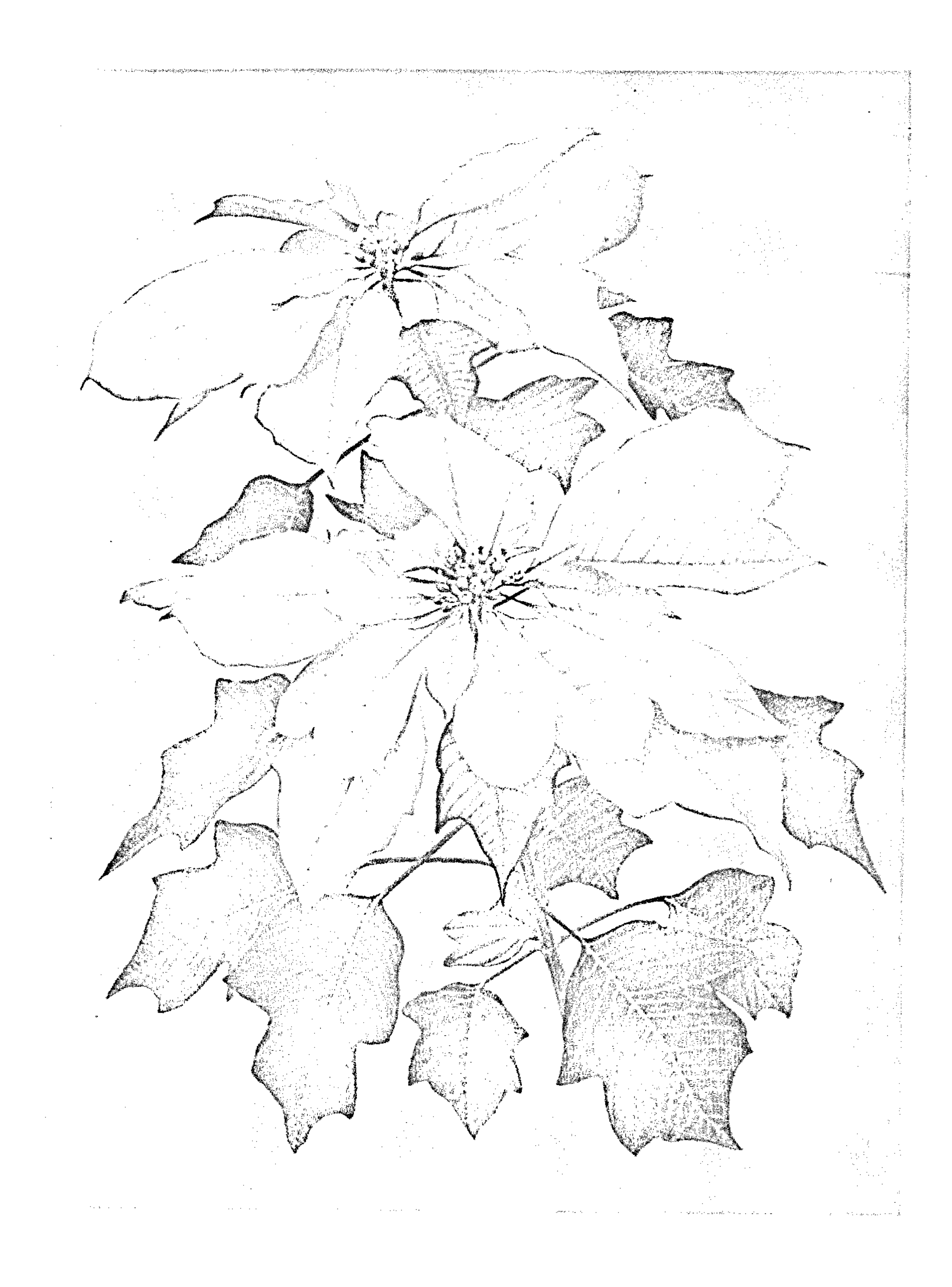
Part Used : Leaves.

Principle constituents : The plant contains cyanogenetic compounds. Leaves contain the flavonoids kaempferol O- glucoside, kaempferol O- rhamnoglucoside and rutin, and the steroidal compound germanicol. An unknown alkaloid was isolated.

Uses : The plant is poisonous, latex is highly irritant producing vesication from contact and purgation and emesis when ingested.

It is not used medicinally. The extract is potent, used as insect - moulting hormone.

References : 1, 2, 3, 21, 26, 30.



(165) FAGONIA BRUGUIERI DC.
ZYGOPHYLLACEAE

English Name : Fagonia.

Local Name : طليحة ، شوكه

Description : Perennial much branched pale green herb. Procumbent with short internodes and numerous spreading or recurved spines. Leaves flat. Petals pale pink.

The plant grows in Brak, Wadi Ajial, and Tibesti .

Part Used : Leaves, flowers, twigs and juice.

Principle constituents : The plant contains sugars, saponins, flavonoids, glycosides and alkaloids.

Uses : Very sweet, used as tonic, diuretic, astringent, antiseptic and as prophylactic against small pox.

References : 1, 2, 3, 12, 13, 14, 19, 21.



(166) FICUS BENGALENSIS LINN.

MORACEAE

English Name : Bengal fig, Pagod tree.

Local Name : تين بنغالي ، أثأب

Description : A large evergreen tree. A single tree can cover a large area by sending down growths from the brances which make roots and grow into trunks . Leaves are 10 - 20 cm long ovate or rounded . Fruit red produced in pairs .

Very rare in Libya.

Part Used : Seeds, fruits, leaves, milky juice and bark.

Principle constituents : Three flavonoids and an unknown glycoside have been isolated from the bark.

Uses : The bark as infusion is tonic, astringent and diuretic, seeds and fruits are tonic. The flavonoids have hypoglycemic effect. The milky juice is applied externally for pains in cases of rheumatism and lumbago. Leaves are applied as poultice to abscesses.

References : 1, 2, 3, 10, 11, 12, 13, 21, 24, 25, 26, 33, 48.



(167) FICUS CARICA LINN.

MORACEAE

English Name : Common fig, Domestic fig.

Local Name : كرموس ،كرموز ، تين

Description : A coarse - leaved cultivated shrub for its fleshy edible fruit which is actually recepticle inside which are the true fruits. Leaves large, lobed, evergreen or deciduous.

Part Used : Fruit and latex from the stems.

Principle constituents : The fruit contains sugars, vitamines A and C, smaller amounts of B and D and unknown alkaloid. The leaves contain enzymes protease, lipase and diastase, the compounds ficusin $C_{11}H_6O_3$ m. p. 161 - 162 C°, bergaptene $C_{12}H_8O_4$ m. p. 188 - 189 C°, psoralene and rutin. The latex contains albumin, salts, gum, pectin, glucose, malic acid and the proteolytic and amylolytic enzymes diastase, esterase, lipase and protease. The amount of latex is less in the early summer than in the other seasons.

Uses : Unripe fruit is emetic while the ripe one is demulcent, nutrient, laxative and diuretic. It is used for the preparation of compound fig syrup B. P. C. The milky juice from the fresh green fruit is acrid and destroys warts. Ficin which is the dried latex is used as ascaricide due to the presence of the proteolytic enzymes which digest round worms. Latex has a strong irritant and analgesic action on the skin. Oral administration of latex is not toxic. Leaves are used to treat haemorrhoids. Ficin prevents co - agulation of milk by digesting caseinogen.

References : 1, 3, 12, 13, 20, 21.



(168) FOENICULUM VULGARE MILL.
UMBELLIFERAE

English Name: Fennel, Lady's chewing tobacco.

Local Name : كمون حلو ، كمون عريض ، بسباس
شمره ، شمر

Description : A perennial plant 80 - 150 cm high. Stem is shiny and solid. Leaves sheathing finely pinnate, bluish - green. Flowers are yellow and occur in a large umbel. The plant is cultivated as vegetable.

Part Used : The herb and the volatile oil obtained from the fruits.

Principle constituents : Fruits contain volatile oil containing anethole, fenchone, camphene, phellandrene, dipentene and chavicol. They contain trigonelline, choline, vitamins A, B and C, and anisic acid.

Leaves contain some fixed oil , fenicularin $C_{20}H_{18}O_{11}$ m. p. 256 C° and cynarin which occurs in artichoke .

Uses : The volatile oil is used as flavouring agent, carminative antispasmodic, stomachic, diuretic, expectorant, aromatic and lactagogue. Roots are used in heart troubles and kidney diseases. Fruits are used as spice, in pickles, candies, in liquors and in the preparation of alcoholic beverages. They are also used as remedy for jaundice and menstrual troubles. The cake left after obtaining the oil is good food for cattles.

References : 1, 3, 10, 11, 12, 13, 14, 18, 20, 21, 22, 24, 25, 26, 33, 38, 40, 43, 54, 55.



(169) FRAGARIA VESCA LINN.

ROSACEAE

English Name : Strawberry.

Local Name : فراوله ، شليك

Description : A well known low growing herb with runners . Leaves trifoliate , bright green above , paler and pubescent blow . The flowers have 5 white petals and produce a red false fruit known as wild strawberry . The plant grows wildly in the cultivated areas .

Part Used : Leaves, rhizomes and fruits.

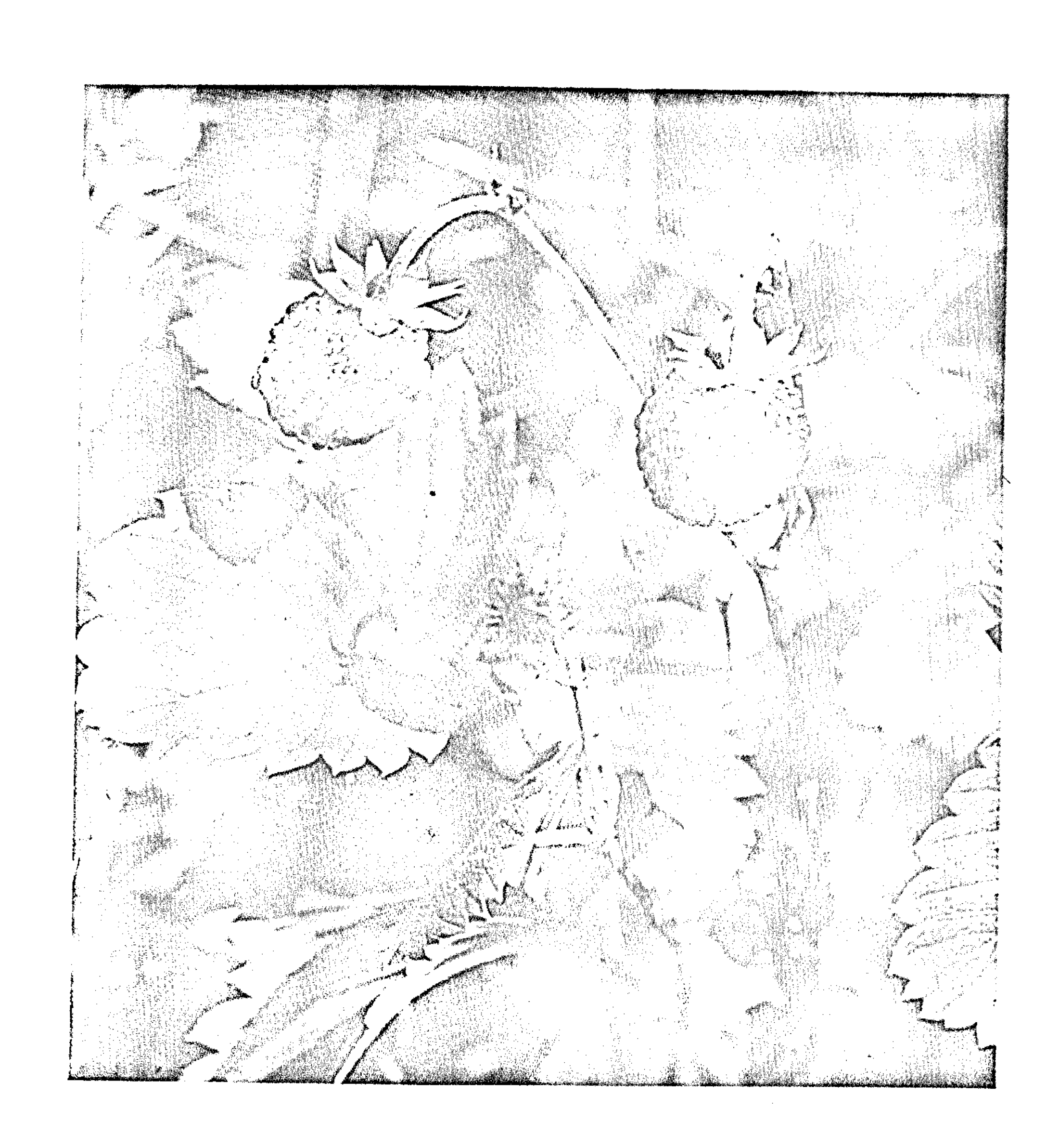
Principle constituents : The plant contains vitamin C. The mature fruit contains mucilage and minerals. Leaves contain tannin and flavonoids.

Uses : Leaves and rhizomes are astringent, diuretic and antidiarrheal. As lotion or gargle they are used for fastening loose teeth.

In some areas leaves are used instead of black tea as a drink.

Fruits are eaten as delicious food either fresh or as jelly or jam.

References : 1, 3, 22, 24, 38, 40.



(170) FRAXINUS EXCELSIOR LINN.
OLEACEAE

English Name : Common ash.

Local Name : مران ، شجر البق
لسان العصفور

Description : A rapid growing shade tree about 30 m high. Leaves compound, opposite. Seed is a samara flattened and winged at the apex.

The tree was introduced and cultivated in Tripoli.

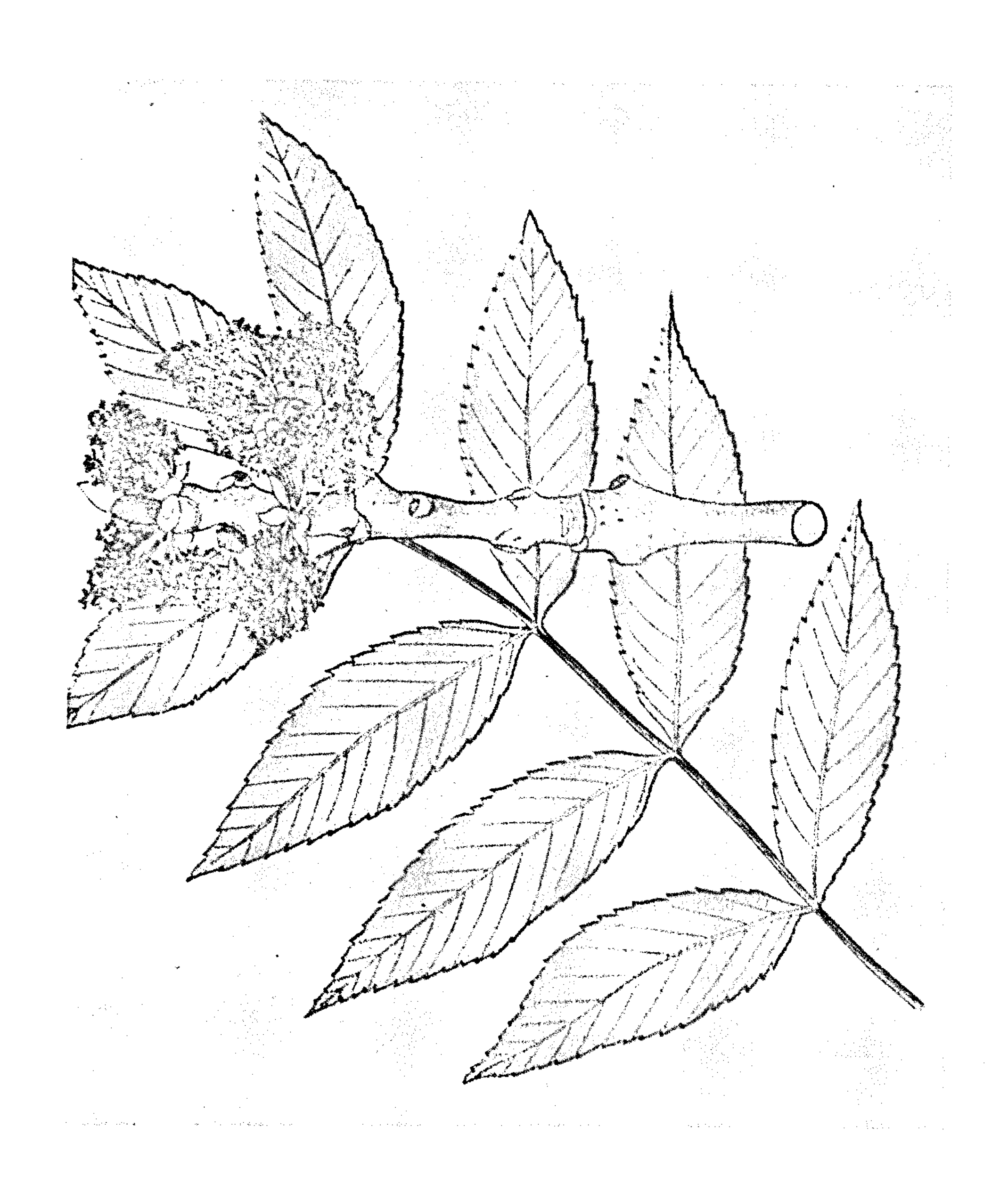
Part Used : Bark and leaves.

Principle constituents : Bark contains tannins, the glucosides fraxin, fraxetol and rutin, sugars, resins and malic acid. Leaves contain flavonoid pigments.

Used : Bark is used in the treatment of haemorrhoids. Leaves are diuretic, purgative, tonic and sometimes used as a substitute for quinine to reduce fever. Leaves are used for rheumatism.

References : 1, 3, 21, 22, 38, 39, 40, 43.





(171) FUMARIA CAPREOLATA LINN.
PAPAVERACEAE

English Name : Ramping fumitory, Fumitory.

Local Name : اصفورن

Description : A low sprawling plant with a weak stem and very finely divided blue - green leaves. Flower pinkish in spikes.

The plant grows in Tripoli and Benghazi.

Part Used : The whole plant without the root.

Principle constituents : The plant contains the alkaloids fumarine, protopine, tetrahydrocoptisine and other minor alkaloids.

It contains potassium salts, fumaric acid and tannin.

Uses : The plant is stimulant, in the form of a tincture, infusion or syrup, it regulates the bile secreation.

References : 1, 2, 3, 13, 33, 38.



(172) FUMARIA OFFICINALIS LINN.
PAPAVERACEAE

English Name : Common fumitory.

Local Name : خلال الغول ، كليله ، ساتراج
كسفره الحمار

Description : A very variable annual sometimes bushy and sometimes long and trailing plant. Leaves pinnate and greyish. Flowers are pinkish - purple occur in groups. The plant occurs in Tripoli and Benghazi areas.

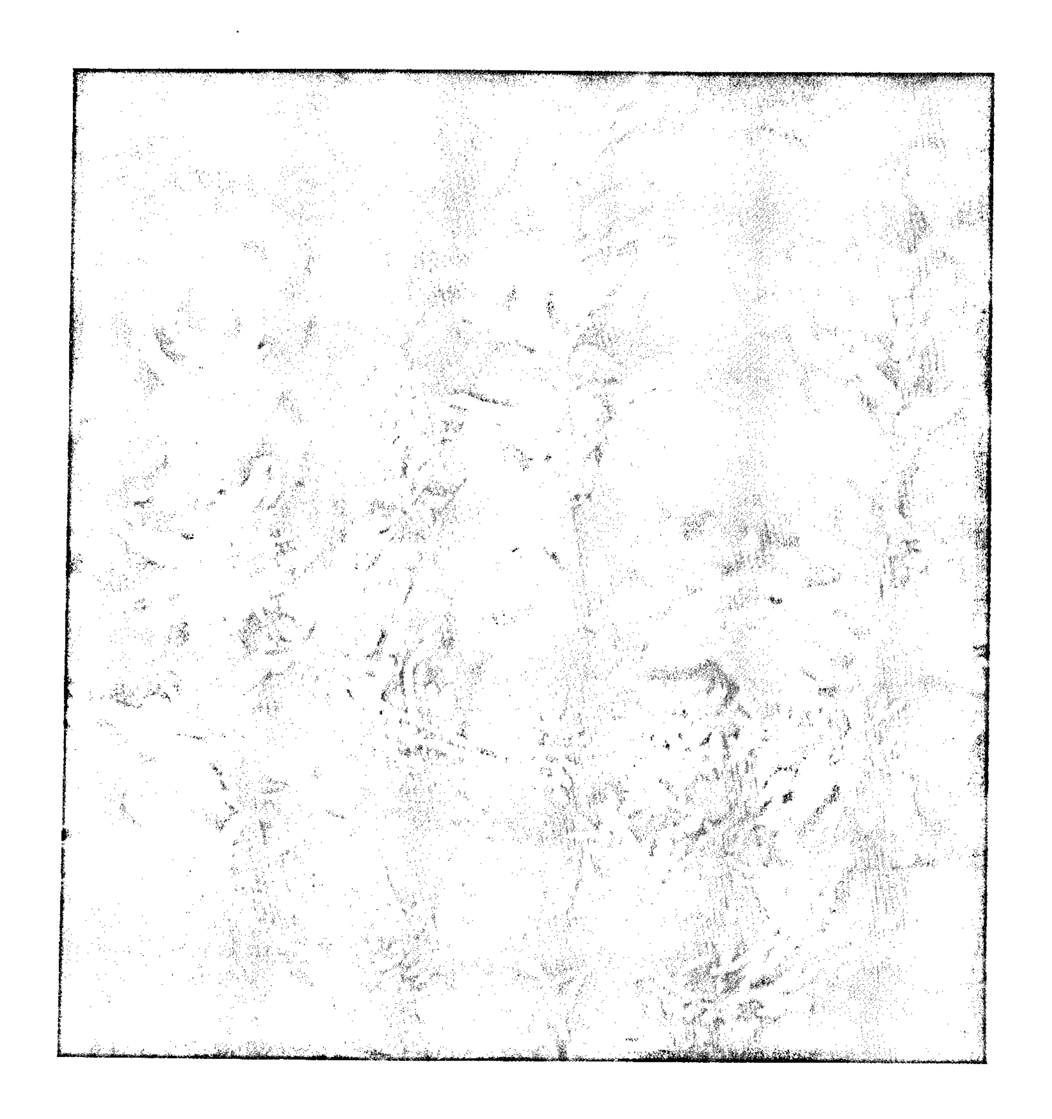
Part Used : Whole plant mainly stems and leaves.

Principle constituents : The plant contains fumaric acid (isomeric with malic acid), tannins, sugars, minerals which are mostly potassium salts and the alkaloids fumarine, protopine, cryptocavine, scoulerine, sinoctine, aurotensine and tetrahydro-coptisine.

Uses : Very effective against eczema and dermatitis. It is astringent, diaphoretic, tonic, diuretic, anthelmintic and laxative. It regulates and stimulates bile secreation.

Experiments proved that the alkaloids cause fall in blood pressure in experimental animals.

References : 1, 3, 12, 13, 20, 21, 28, 33, 38, 40.



(173) GALIUM APARINE LINN.
RUBIACEAE

English Name : Goose grass, Cleavers, Hairif, Sticky willie.

Local Name : حشيشة الأفعى ، بلسكي

Description : An annual widespread weed with whorled, lanceolate leaves about 3 cm long, 6 - 8 at a node. Flowers are minute and white in colour.

The plant grows in Tripoli, Tarhuna and Benghazi.

Part Used : The flowering tops.

Principle constituents : The plant contains the glucoside asperuloside .

Uses : Hypotensive, antirheumatic, antispasmodic, astringent, antipyretic and diuretic. It is used to heal ulcers and wounds.

References : 1, 3, 21, 22, 38, 39, 40.



(174) GALIUM MOLLUGO LINN.
RUBIACEAE

English Name : Upright bedstraw.

The plant is a perennial weed almost used as Galium aparine but it contains oxanthine alkaloids and oxalic acids.

References : 1, 2, 3, 12, 21, 22, 38, 39, 40.





(175) GERANIUM ROBERTIANUM LINN.
GERANIACEAE

English Name : Herb robert, Adder 's tongue.

Local Name : عتر ، عطر ، أبرة الراهب

Description : An annual plant 15 - 40 cm high. Stem reddish. Leaves triangular, divided into 3 - 5 lobed segments. Flowers pink about 2 cm in diameter having a strong smell.

The plant occurs in Shahat, Wadi El kuf, Wadi Derna and Wadi Lagdab.

Part Used : The entire plant without the root.

Principle constituents : The plant contains volatile oil with disagreable characteristic odour. It contains the bitter principle geraiine and tannin.

Uses : The plant is astringent, haemostatic and sedative. It is used to treat eye conditions , skin erruptions and buccal inflammations . It stops diarrhea and heals wounds.

References : 1, 3, 12, 18, 21, 25, 38, 40.



(176) GLAUCIUM FLAVUM CRANTZ .
PAPAVERACEAE

English Name : Yellow horned poppy, Sea poppy.

Local Name : قرن الجديان

Description : A wild growing annual, biennial or perennial herb about 80 - 100 cm high with orange coloured juice. Leaves lobed, glaucous. Flower golden yellow to orange, 5 cm in diameter. Fruit is a narrow pod 30 cm long. The plant grows in Tripoli and Benghazi areas .

Part Used : The isolated alkaloids.

Principle constituents : More than 35 alkaloids have been isolated from the plant the most important of which are glaucine, protopine, sanguinarine, chelirubine, chelerythrine, arosine, arosinine, isocorydine, glauflavine and magnoflorine.

Uses : The alkaloid glaucine is the one used medicinally. In addition to its antagonising action to adrenaline, it has antitussive property and is used in cough medicines. It is also hypotensive.

References : 1, 2, 3, 34.



(177) GLOBULARIA VULGARIS LINN.

GLOBULARIACEAE

English Name : Blue daisy, Globe daisy.

Local Name : زريقة ، عينون ، كحلي

Description : A low - growing perennial herb 5 - 20 cm high. Leaves are oval in a basal rosette. Flower heads are bright blue and globular.

The plant is common in Garian, Kussabat, Derna and Tobruk.

Part Used : Leaves.

Principle constituents : Leaves contain a bitter principle known as globularin, resin, flavonoids, manitol, cinnamic acid, volatile oil, salts and mucilage.

Uses : The plant is diuretic, astringent and laxative. The laxative action is due to the resins.

References : 1, 3, 21, 34, 41, 44.



(178) GLYCIN MAX LINN.
GLYCIN SOJA SIEB. and ZUCC.
LEGUMINOSAE

English Name : Soy beans, Soya beans.

Local Name : فول الصنويا

Description : One of the important agricultural crops. It is a bushy annual herb.

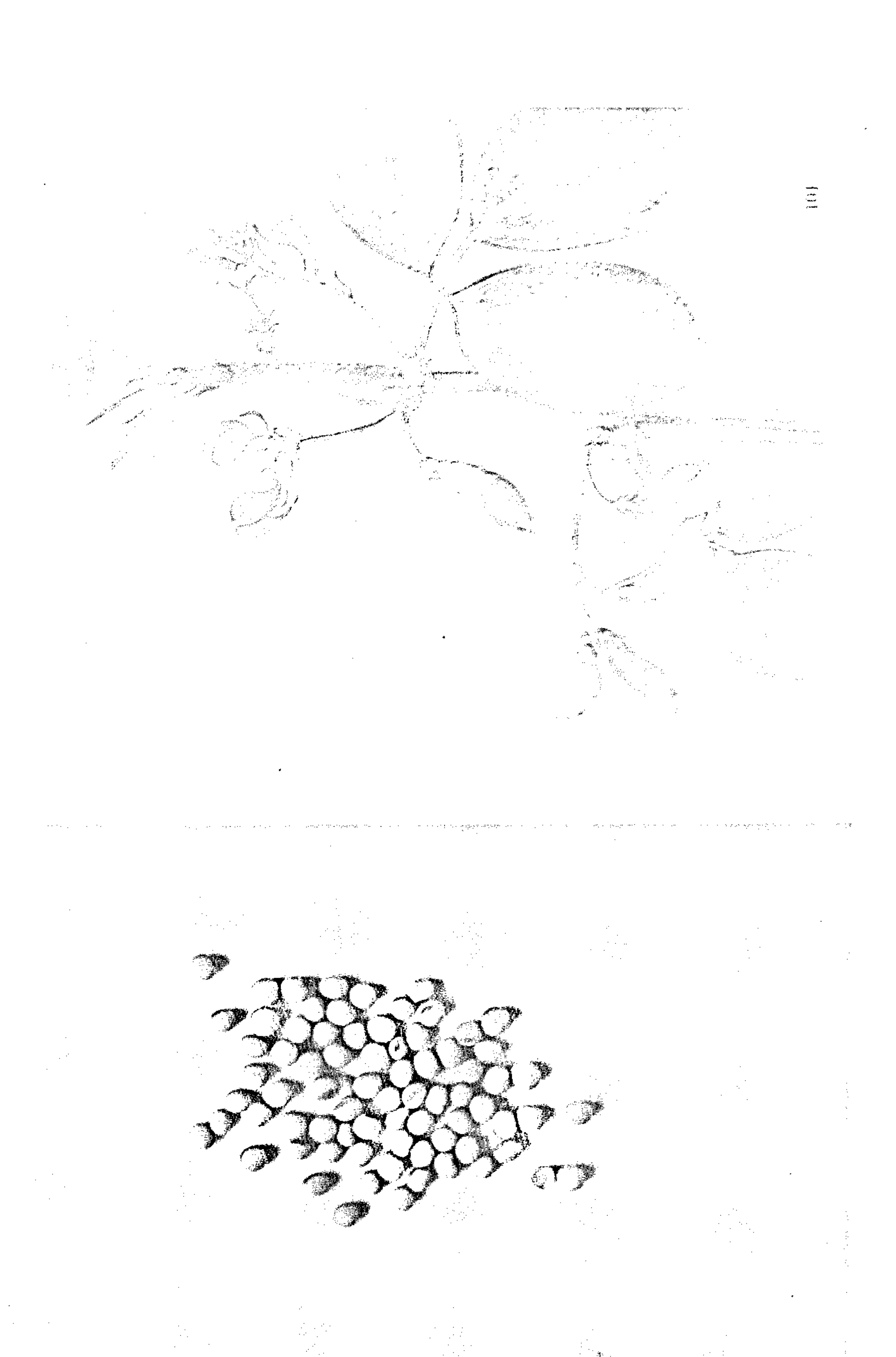
Leaves alternate with 3 leaflets 10 - 20 cm long. Flowers white inconspicuous pea - like. Fruit is a pod 5 - 7 cm long and one cm wide .

Part Used : Beans and bark.

Principle constituents : The beans contain two isoflavones genistein and daidzein having estrogenic properties, stigmasterol which is used as a precursor for the production of hormones. They contain 20 % fat, 40 % protein, 2 % licithin and steroidal saponins, vatamins B and E, carotenoids, flavone glycosides and essential amino acids.

Uses : Nutrient, used as meat substitute, ideal for diabetic patients because its sugar is hardly assimilated. The beans contain four times the calories of equal weight of beef meat. The protein is used in industry for making plastics and adhesive materials. Decoction of the bark is astringent. Beans are hypoglycemic and hypocholestrolemic.

References : 1, 3, 13, 21, 22, 24, 26, 38, 40.



(179) GLYCYRRHIZA GLABRA LINN.
LEGUMINOSAE

English Name : Liquorice.

Local Name : عرقسوس ، عرق سوس

Description : A herbaceous perennial plant. It forms long underground stolons which are yellow inside and extend up to 5 m in every direction. The plant does not occur in Libya but its cultivation has been recommended.

Part Used : Roots and rhizomes either peeled or unpeeled.

Principle constituents : Liquorice contains the sweet compound glycyrrhizin which is 50 times as sweet as sugar. It is potassium and calcium salts of glycyrrhizinic acid, this acid is derived from glycyrrhetinic acid (known as glycyrrhetic acid). Liquiritic acid has been recently isolated. The rhizomes contain flavonoids , triterpenoid saponin , resins , asparagin , beta - sitosterol , bitter principle glycyramarin , sucrose , steroidal hormones , spasmolytic and estrogenic principles and unknown alkaloid . The plant contains a pentacyclyc triterpenoid glabric acid $C_{30}H_{46}O_5$ m. p. 329 - 33 C° and malic acid .

Uses : The plant is tonic, demulcent, expectorant, diuretic, mild laxative and as flavouring agent in cough mixtures. It has a wonderful heeling effect on peptic ulcer, reduces 70 - 90 % of the size of the ulcer after one month treatment. It has a desoxycorticosterone effect and therefore used to treat rheumatoid artheritis and Addison 's disease. The estrogenic compounds activate the function of ovaries. Excessive ingestion leads to severe hypertension.

References : 1, 3, 20, 21, 22, 25, 26.



(180) GOSSYPIUM ARBOREUM LINN.
MALVACEAE

English Name : Cotton.

Local Name : قطن

Description : An annual cultivated shrub about 120 - 150 cm high with a woody erect stem. Leaves 3 - 9 lobed and rarely entire. Flower yellow or white tinged with purple. Fruit is a pod, breaks showing the seeds and the white fibers known as cotton.

The plant was introduced and cultivated in Tripoli.

Part Used : Seeds, fixed oil, cotton fibers and roots.

Principle constituents : Seeds contain edible fixed oil. Seed hulls contain leuco - anthocyanidin and colouring matter gossypol. The cake left after getting the oil is rich in protein.

Uses : Fixed oil is edible used in cooking and in salad. In India seeds are used in gonorrhea, chronic cystitis and catarrh. Root decoction was used by the people of Alabama state in U. S. A. to ease labour and reduce fever. Oil cake is good nutrient for livestock.

References : 1, 3, 12, 13, 17, 21, 24, 25, 38.



(181) HALOXYLON SALICORNICUM MOQ.

CHENOPODIACEAE

Local Name : رمث ، بغل

Description : A shrub or small tree with jointed branches. Leaves opposite and minute. Flower solitary, axillary and cream - white. The plant occurs in Wadi Masauda, Nalut and Wadi Derna.

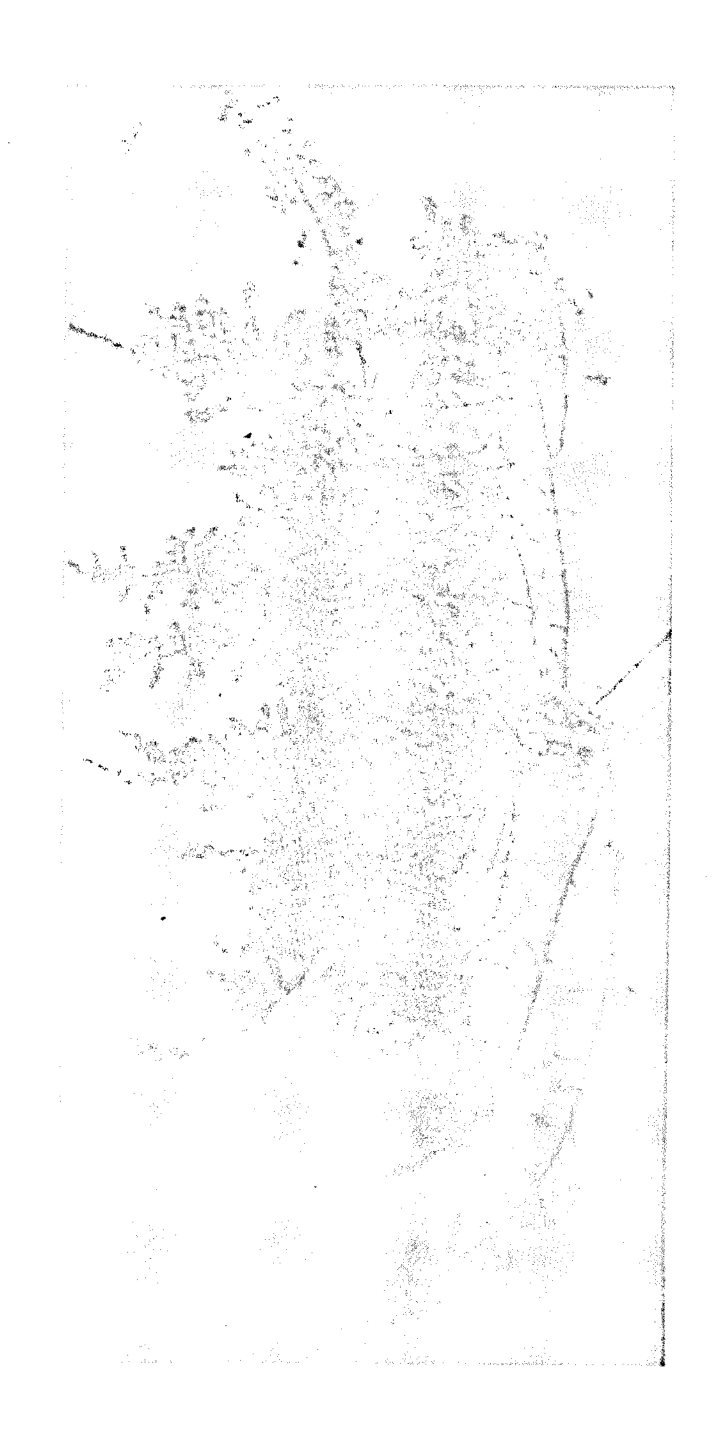
Part Used : The whole plant.

Principle constituents : The plant contains the alkaloids aldotripiperidine, haloxine, halosaline, anabasine, oxedrine, piperidine and betaine. It contains also phenolic compounds tyramine and N-methyl - tyramine .

Uses : The plant is toxic.

References : 1, 2, 3, 14, 21, 32.





(182) HAPLOPHYLLUM TUBERCULATUM. FORSK.

RUTACEAE

Local Name : شجرة الريح

Description : A herb with a woody root. Leaves simple or 3 parted. Flowers yellow with the unpleasant smell of sweaty arm-pits.

The plant grows in Wadi Kaam and Bir el Ghnem.

Part Used : The entire plant.

Principle constituents : Alkaloids robustine, dubamine, fagarine, dictamnine and haplophyline.

Uses : It is used as aphrodisiac and carminative.

Refernces : 1, 2, 3, 14, 32, 34.



(183) HEDERA HELIX LINN.
ARALIACEAE

English Name : Common ivy, Ivy, English ivy.

Local Name : حبل المساكين ، لبلاب كبير ، قسوس

Description : A woody perennial evergreen plant climbing by means of aerial roots. Leaves variable, dark green, tough, shiny. Flowers small greenish, arranged in an umbel. The fruit is a black berry.

The plant was introduced as ornamental, grows on the outer walls of the buildings.

Part Used : Young leaves and berries.

Principle constituents : Leaves contain the saponin glycosides hederin $C_{32}H_{52}O_{10}$ and hederagenin and white saponin . They contain also the glycoside hederacoside m. p. 257 - 60 C° and helixin and vitamin C .

Uses : The powdered leaf steeped in vinegar is applied to corns and cancerous growths. The resinous exudate from the stem is emmenagogue and reiieves tooth ache. One gram of the fruit produces sterility. The plant is emetic, narcotic, antispasmodic and used in case of whooping cough.

The fruits are toxic and irritant. Leaves produce dermatitis and hederin is haemolytic.

References : 1, 3, 10, 12, 21, 22, 40.



(184) HELIANTHUS ANNUUS LINN.
COMPOSITAE

English Name : Sunflower, Golden flower of peru, Common - sunflower.

Local Name : عباد الشمس ، نوار الشمس ، عين الشمس

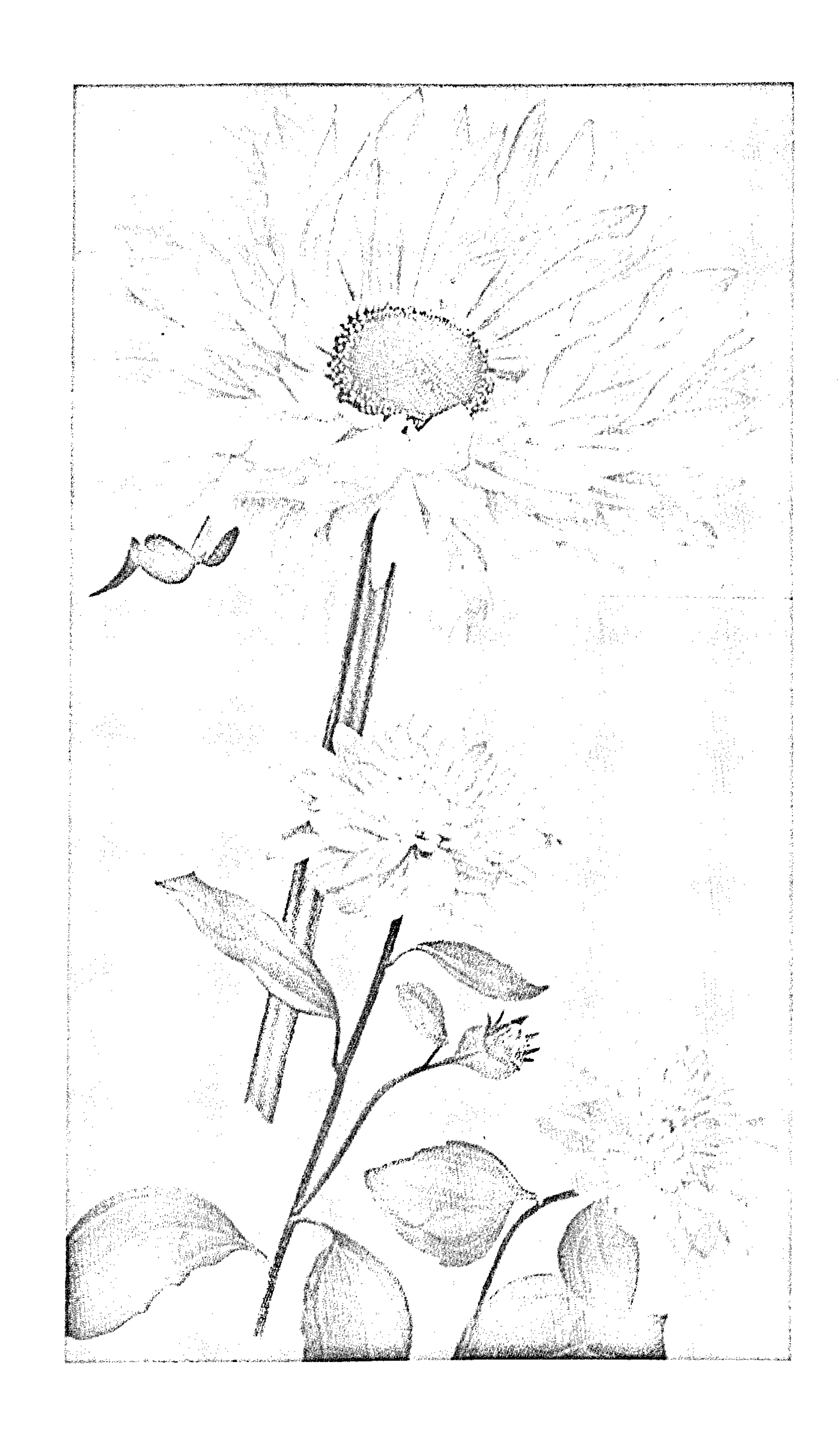
Description : An annual cultivated plant with a strong erect stem about 3 m. high. Leaves petioled ovate, lower leaves are cordate. Inflorescence very large drooping head, solitary, ray - florets golden yellow, disk - florets brown, involucral bracts ovate hairy. Seeds streaked with white and black.

Part Used : Seed oil and flower petals.

Principle constituents : Seeds contain about 30 % fixed oil rich in unsaturated fatty acids, glycosides, choline, quercitrine, betaine, lecithin, nuclein, resins, vitamin C, organic acids and a yellow dye. The plant is very rich in histidine. The petals contain yellow dye and the glucoside quercimeritrin $C_{21}H_{20}O_{12}$ $3H_2O$ m. p. 247 - 49 C°. Sepals contain a sterol - like substance. The leaves contain the organic acids malonic , lactic , succinic and fumaric .

Uses : The oil is nutrient like corn oil. It is recommended in cases of hypercholesterolemia and arteriosclerosis. Seeds are diuretic, expectorant. They are used in bronchial, laryngeal and pulmonary infections, cough and cold. In China seeds are administered in dysentery. Leaves are reported to be used in malarial fever. Oil cake is valuable food for cattle and poultry. It possesses hypoglycemic activity.

References : 1, 3, 10, 12, 14, 20, 21, 22, 24, 25, 26, 38, 40



(185)HELIOTROPIUM RAMOSISSIMUM REHM.

BORAGINACEAE

English Name : Common heliotrope.

Local Name : رمرام

Description : A small shrub 30 -60 cm. high branched from the base. Stem is erect ascending or procumbent. Stems and leaves are best with greyish appressed hairs. Leaves with short pedicles lanceolate to linear acute with wavy margin.

flowers minute, creamy, occur in loose raceme inflorescence. The plant was found in Bu Ngem in Tripoli area.

Part Used : Leaves.

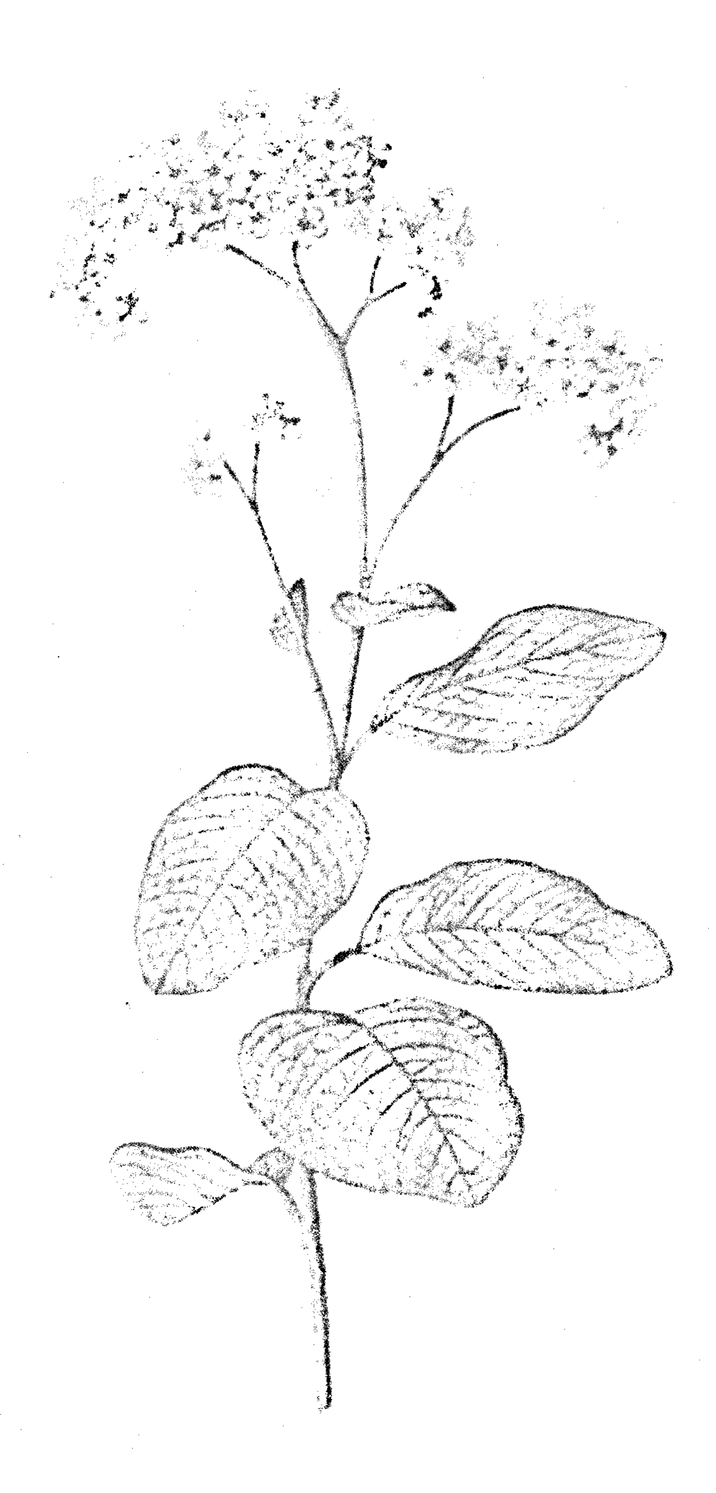
Principle constituents : Four pyrrolizidine alkaloids, heliotrine, helurine, supinine and lasiocarpine.

Uses : As a cure for snake bites. It is said that the warral (snake eating lizard) rubs itself and rolls in the plant after contact with snakes.

The alkaloids are known to be hepatocarcinogenic. The plant causes liver damage in horses leads to liver cirrhosis and death.

It is known that pyrrolizidine alkaloids are carcinogenic.

References : 1, 14, 22, 32, 34.



(186) HERNIARIA GLABRA LINN.
CARYOPHYLLACEAE

English Name : Rupture wort, Turk's herb.

Local Name : أم وجع الكبد ، نبات الشيح

Description : A creeping perennial plant, moss - like in appearance, glabrous and bright green. Branches slender. Flower sessile small and greenish. The plant grows in Benghazi, Fueihat and Tobruk.

Part Used : The entire plant.

Principle constituents : The plant contains flavonoid pigments, saponin known as hérniarin, coumarines and the alkaloid paronychine.

Uses : It is a strong diuretic, purgative and it is very irritating to the stomach. There is an old story refers to its use in treating hernia.

The plant produces nausea, vomiting, heart - depression and coldness of extremities.

References : 1, 2, 3, 10, 33, 38.



(187) HIBISCUS ROSA - SINENSIS LINN.
MALVACEAE

English Name : China rose, Chinese hibiscus.

Local Name : أنجة هندي

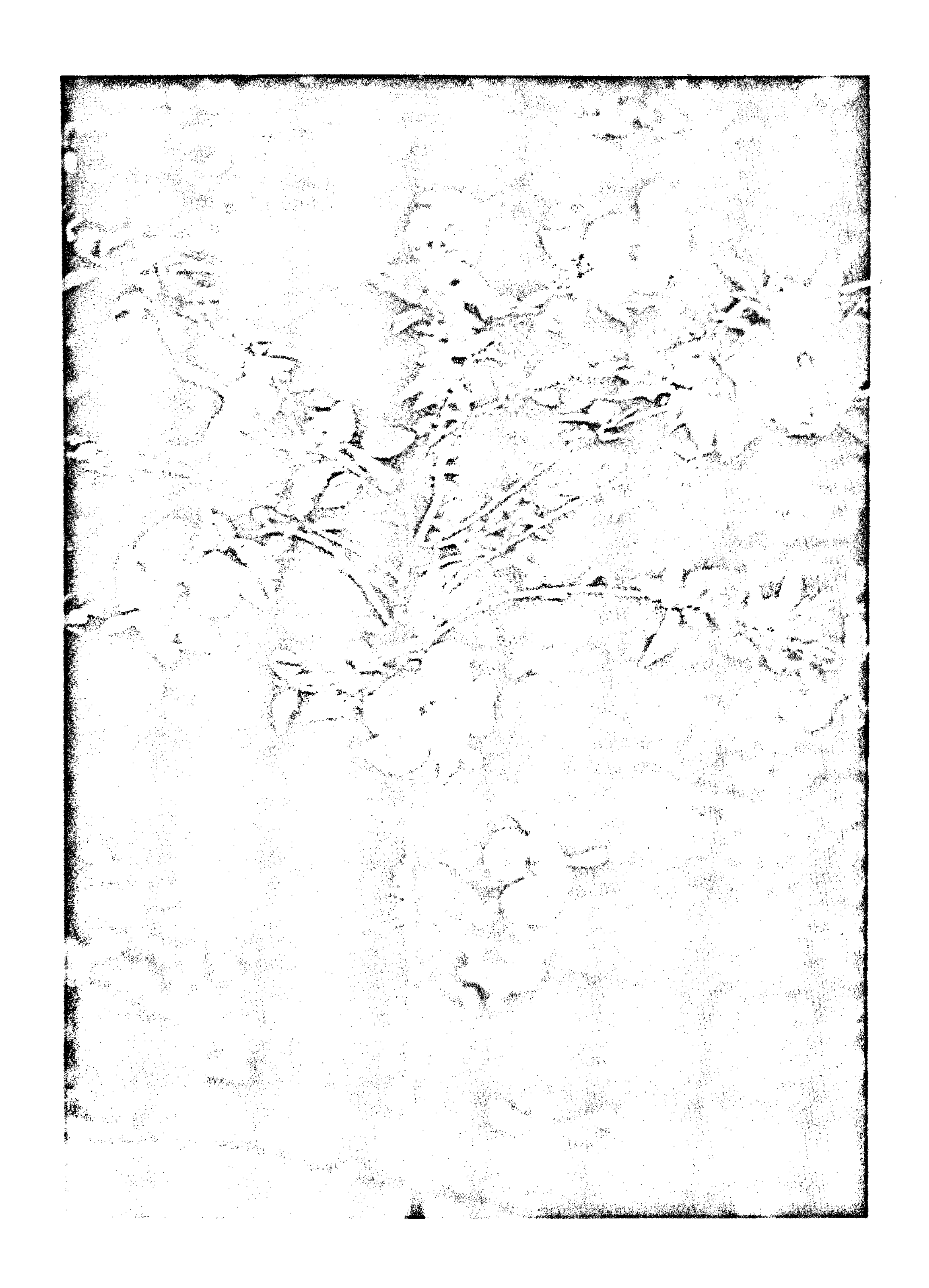
Description : An ornamental shrub 2 - 3 m. high. Leaves alternate and glossy. Flowers large funnel - shaped about 15 cm in diameter, bright rose - red in colour.

Part Used : Flowers, leaves, root and bark.

Principle constituents : Vitamins B 1, B 2, niacin and vitamin C , iron , cyanidin , the glycoside hibiscin hydrochloride $C_{20}H_{19}O_{10}CL$ m. p. 192 C° colouring matter and calcium oxalates .

Uses : The root, bark, leaf and flower are emollients and demulcents. The flowers regulate menstruation and sometimes cause abortion. The flower decoction is used as lactagogue, contraceptive, demulcent and as a paste in case of mumps. Roots are used in cough as a substitute for Althea. Fresh leaves are crushed and used as poultice to abscesses and carbuncles. The colouring matters are used in confectionary and cosmetics. The bark is hypotensive, emmenagogue and intestinal and urinary antiseptic.

References : 1, 3, 12, 14, 15, 21, 22, 54.



(188) HIBISCUS SABDARIFFA LINN.

MALVACEAE

English Name : Roselle, Red sorrel, Jamaica sorrel, Karkade, Sudanese tea, Sabdariffa .

Local Name : كركديه

Description : A small cultivated shrub about 2 m. high having red stem and solitary flowers borne on short peduncles. Petals five with five lobed red calyx accompanied by a so called epicalyx consisting of ten fleshy red bracteoles.

Part Used : Calyx, leaves and seeds.

Principle constituents : The organic acids malic, tartaric and hibiscic $C_6 H_6 O_7$ the glycosides hibiscin hydrochloride $C_{20} H_{19} O_{10} CL$ and hibiscitrin which yields the aglycon hibiscetin $C_{15} H_{10} O_9$ vitamin C , tannin , calcium oxalates and red colouring matter . It contains two anthocyanins gossipetin (hydroxyflavone) and hibiscin . Seeds contain fixed oil .

Uses : Calyx is used as a source of vitamin C, diuretic, mild laxative and intestinal antiseptic. It reduces blood pressure, stimulates intestinal peristalsis and allays thirst. The red colouring matter is used in cosmetics, jams, and used as a poultice on abscesess.

Seeds are aphrodisiac . The calyx is not advised to be used by people suffering from kidney diseases .

References : 1, 2, 3, 10, 14, 17, 21, 24, 54.



(189) HORDEUM VULGARE LINN.
GRAMINEAE

English Name : Barley grass , Common barley

Local Name : شعير

Description : An annual field crop cultivated for the production of the edible fruits (barley grains). The fruiting spikes are 10cm long, owns upto 15 cm long arranged in two erect rows.

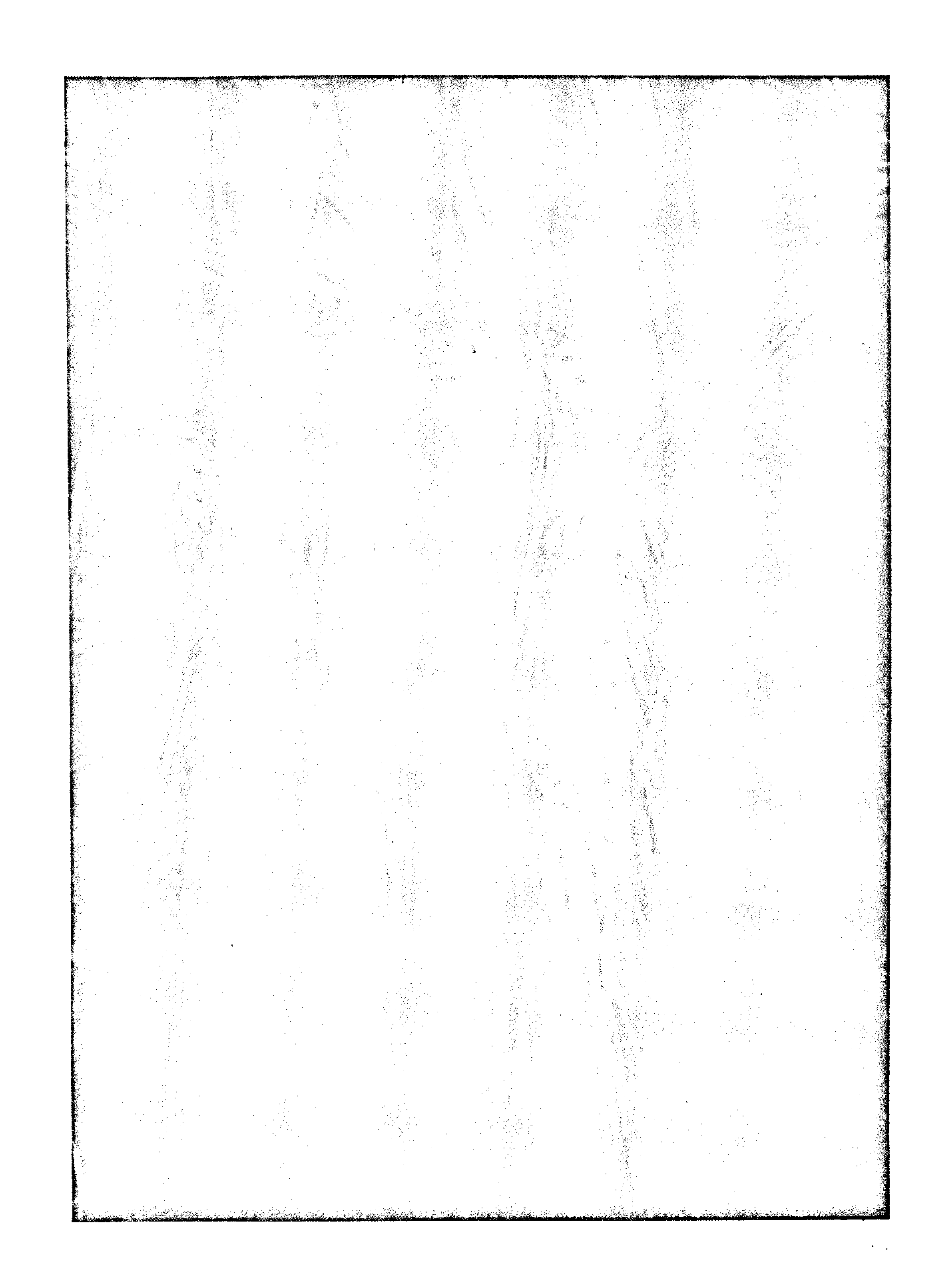
Part Used : Fruits (grains).

Principle constituents : Grains contain the amine alkaloids gramine and hordenine , N - methyl tyramine , $C_{10}H_{15}ON$ m. p. 117 - 18 C° , protein , lipids , starch , allantoin and enzymes . The embroy is rich in vitamins B and E .

Uses : It is used as vasopressor agent. It has hypoglycemic activity. Hordenine is sympathomimetic compound like adrenaline . It can be used in case of bronchitis like ephedrine . Decoction of the grains is a very good diuretic and can be sued in cases of urinary calculi .

In addition barley is used for the production of beer which is also a good diuretic .

References : 1, 3, 10, 12, 21, 22, 26, 32, 38, 40.



(190) HYOSCYAMUS ALBUS LINN.
SOLANACEAE

English Name : Henbane, White henbane.

Local Name : قنقيط ، بنج ، سكران ، بتيمه ، فلزلز

Description : Wild erect herb 80 - 100 cm high. The plant has characteristic odour. Flower funnel - shaped, pale yellow to almost white. Leaves round cordate, deeply incised, toothed. Fruit capsule. The herb grows in Benghazi, Tripoli, Tarhuna, Garian, Jado and Nalut.

Part Used : Leaves and flowering tops.

Principle constituents : The plant contains the tropane alkaloids atropine, hyoscyamine and hyoscine which is known as scopolamine. Upon drying or during the process of isolating the alkaloids, hyoscyamine is converted to atropine by racemization.

Uses : In small doses the plant is sedative, analgesic and antispasmodic. Atropine is mydriatic. In large doses the plant is narcotic and halucinogenic.

References : 1, 2, 3, 11, 12, 22, 25, 28, 32, 33, 54.

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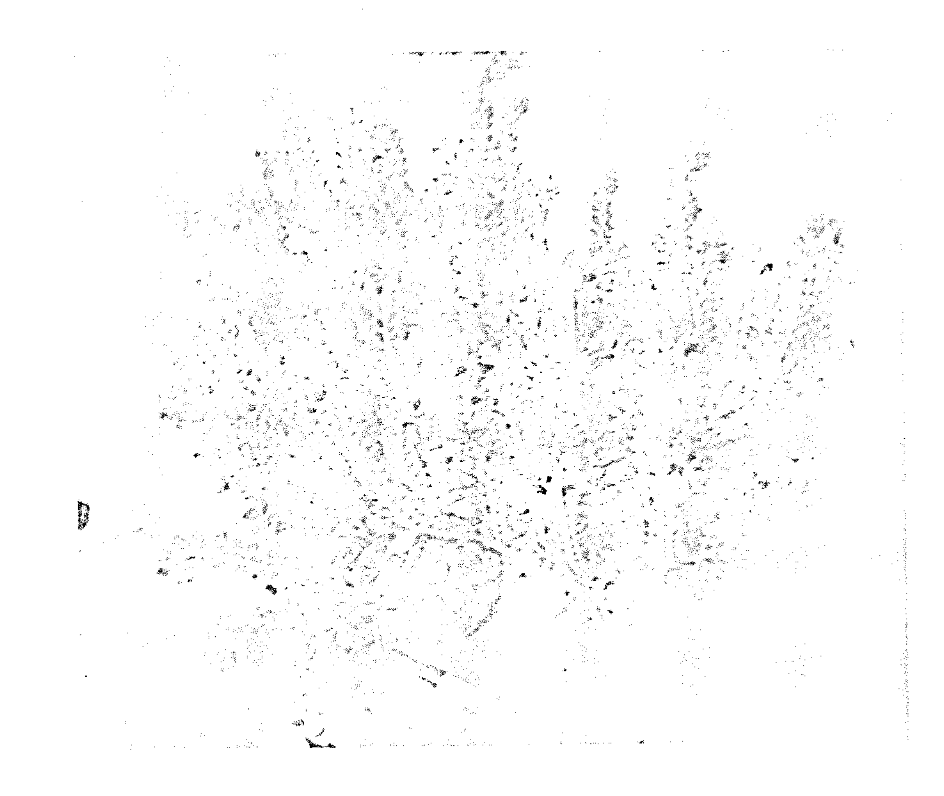
(191) HYOSCYAMUS MUTICUS LINN.
SOLANACEAE

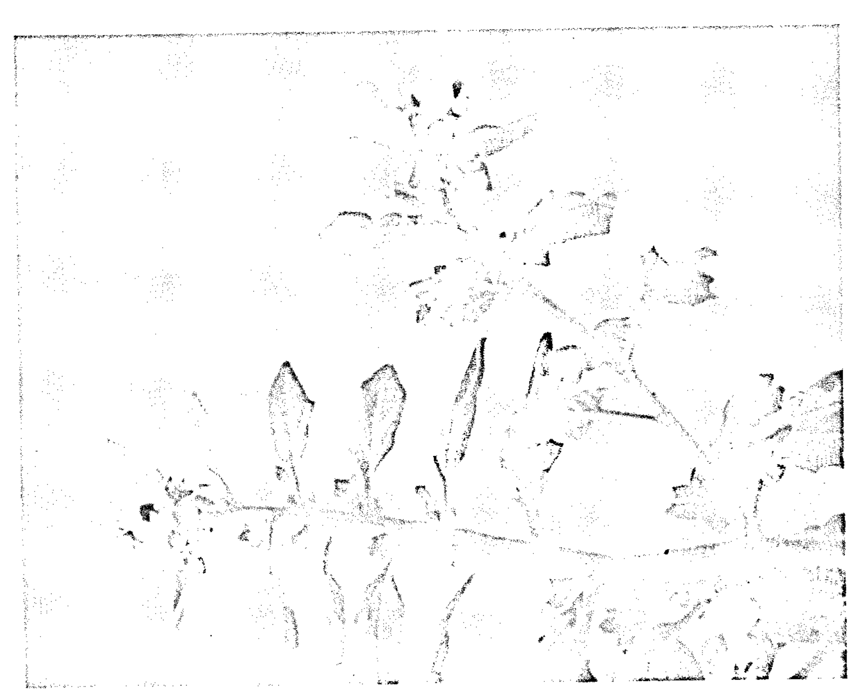
English Name : Egyptian henbane.

Local Name : فلزلز ، سكران مصري ، قنقيط

Part Used : Constituents and uses are those of hyoscyamus albus. As the plant contains high amount of alkaloids upto 1.5 %, it is used commercially for the preparation of alkaloids.

References : 1, 2, 11, 12, 14, 22, 25, 26, 28, 33, 38, 54.





(192) HYPECOUM PROCUMBENS LINN.

PAPAVERACEAE

English Name : Horned cumin, Procumbent hypecoum.

Local Name : جهيرة ، افيقوون

Description : An annual herb with yellow narcotic juice. Leaves bipinnatisect, leaf segments short and broad. Flower small, yellow, solitary. Fruit narrow, siliquose, articulated.

The plant grows in Marsa susa, Tripoli and Benghazi areas.

Part Used : The flowering plant.

Principle constituents : It contains protopine alkaloid and other minor ones.

Uses : The protopine alkaloid has antiarrythmic properties. The juice has been reported to possess a narcotic effect similar to that of opium. Leaves are diuretic.

References : 1, 3, 11, 21, 28, 32, 33.



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(193) HYPHAENE THEBAICA MART.
PALMACAE

English Name : Doum -palm, Dum nut, Ginger bread tree.

Local Name : دوم ، شجرة المقل

Description : A fan palm with repeatedly forked stem up to 20 m high. Leaves 20 - 30 in a terminal crown on each branch. Flower small yellow. Fruit contains one central stone, pericarp sugary. The plant grows in Tedjerri Oasis south of Murzuk.

Part Used : The fruit.

Principle constituents : The nut contains mannitol sugar. The « Dum -Pod » has an active charcoal with high decolourizing and obsorbing power. Roots contain tannin and gum.

Uses : The fruit is nutrient, eaten like dates but it is of inferior quality.

The fruit extract is used as a soft dink like Cocacola in some countires .

References : 1, 2, 3, 10.



(194) ILEX PARAGUARIENSIS ST. HIL.

AQUIFOLIACEAE

English Name : Mate, Yerba tea, Paraguaya, Paraguay tea.

Local Name : شاي البراجواي

Description : An evergreen tree about 4 -5 m high. Leaves obovate or oval coarsely leathery and shallowly toothed especially towards the apex. Flower green in axillary stalked cluster.

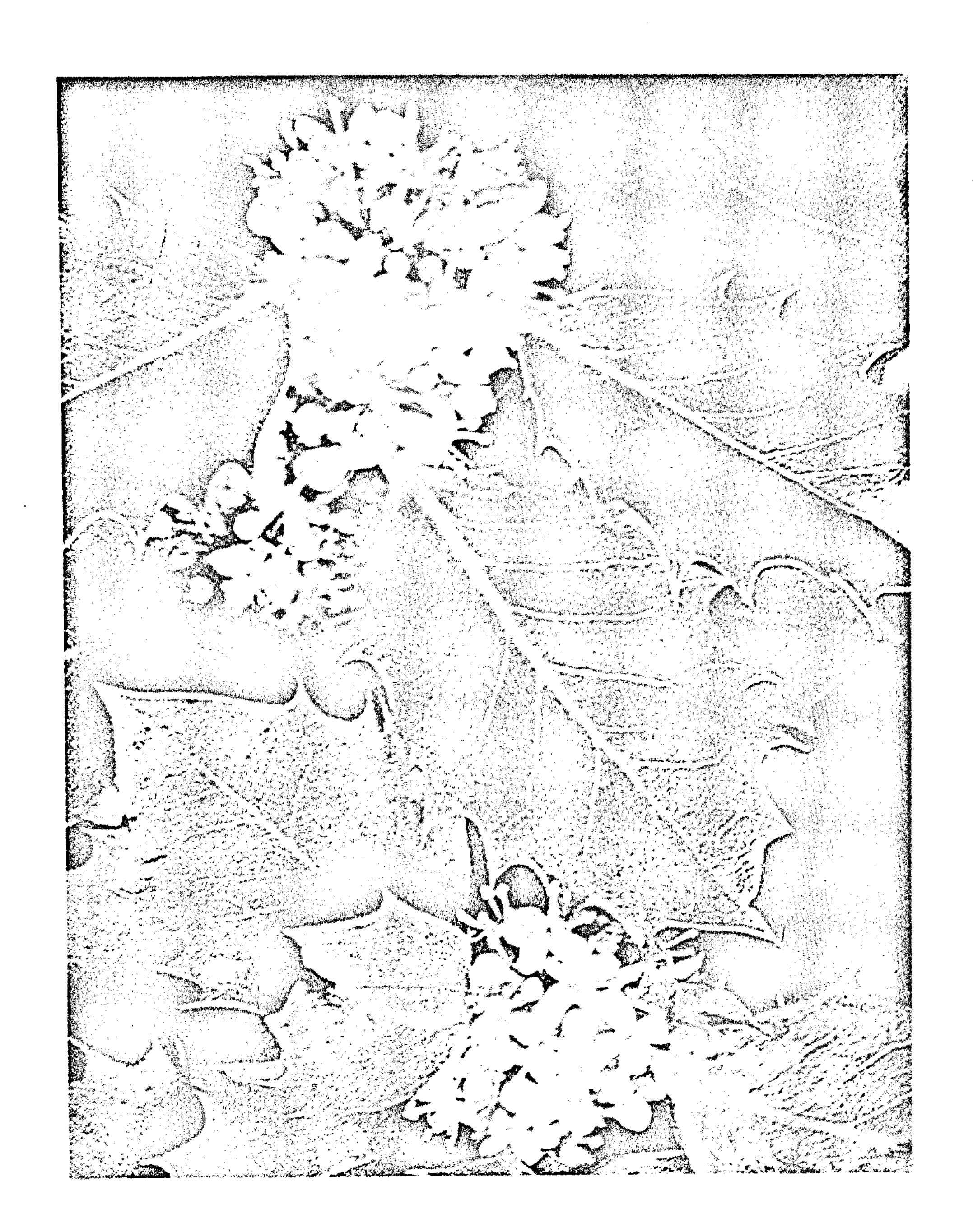
The plant was introduced into Tripoli.

Part Used : Dried and cured leaves.

Principle constituents : Contains upto 2 % caffeine, theobromine, theophylline, trigonelline, catechol tannin as caffeotannic acid, little volatile oil, vitamins, chlorogenic and neochlorogenic acids.

Uses : Leaves are central nervous system and muscule stimulant. It is used as drink like tea and coffe. In large doses it is used as laxative or purgative. It is also diaphoretic and diuretic. In Brazil it is a very popular beverage and known as paraguay, mate or yerba tea.

References : 1, 3, 12, 21, 22, 24, 25, 26, 32, 33, 37, 40, 57.



(195) IPOMOEA BATATAS LINN.
CONVOLVULACEAE

English Name : Sweet potato.

Local Name : بطاطا حلوة

Description : A glabrous twining herb cultivated as a vegetable crop for the production of edible sweet potato tubers.

Part Used : Tubers.

Principle constituents : Starch, sugars, vitamins B, C, D and G, sterols, carotenoid pigments, the globulin ipomoein, volatile oil containing the ketone ipomarone $C_{15}H_{22}O_3$ (very toxic to animals) . The reporoductive vegetative organs (top of the plant) contain HCN . Leaves contain insulin - like compound , one gram of which has the value of 440 insulin - units .

Uses : The tubers are nutrient. Ipomarone is used as anthelmintic and was found more toxic than santonin. Tubers are considered a source of starch and making alcohol.

Leaf is a good source of vitamins, it is antidiabetic. Roots are laxative.

References : 1, 3, 10, 16, 21.



(196) IRIS FLORENTINA LINN.
IRIDACEAE

English Name : Orris, Florentine iris, Iris.

Local Name : سوسن ، سوسن أبيض ، زنبق ، دهق

Description : A perennial cultivated ornamental herb with sword - like leaves and rhizomatous roots. Flowers white or tinged with lavender.

The plant is indigenous to Benghazi.

Part Used : Rhizomes.

Principle constituents : Resin, volatile oil containing the ketones irone and ionone . The rhizomes contain myristic acid, iridin glycoside , starch and beta - sitosterol .

Uses : Purgative, emetic and diuretic. Due to the presence of the odourous compound irone, it is used in cosmetics, tooth pastes and in dusting powders.

References : 1, 3, 12, 14, 22, 25, 26, 38, 54.



(197) IRIS GERMANICA LINN.
IRIDACEAE

English Name : Blue flag, Flag lily, German iris.

Local Name : شعب الطيب ، عرق الطيب
كف الصباغ ، زنبق أزرق

Description : A perennial cultivated ornamental herb with sword - like leaves and rhizomatous roots. Flowers lilac to lilac - purple.

Part Used : Rhizomes obtained in the autumn.

Principle constituents : Contains 5 % starch, mucilage, glucoside iridin, myristic acid, fixed oil and volatile oil containing irone having the aromatic odour of violette.

Uses : Aromatic, added to many Galenical preparations such as syrups and cough mixtures. The rhizome is given to children for biting to facilitate dentation (growth of teeth). It has antiscorbutic value equivalent to 2.1 mg / gm ascorbic acid. It is also used in cosmetics such as tooth pastes, face powders and perfumes.

References : 1, 3, 10, 12, 21, 25, 26, 38, 40, 54.



(198) JASMINUM GRANDIFLORUM LINN.
OLEACEAE

English Name : Jasmine, Royal jasmine.

Local Name : ياسمين

Description : An ornamental straggling bush cultivated for the production of jasmine oil. Leaves evergreen opposite. Flower white.

Part Used : Leaves, flowers and the natural volatile oil obtained from them.

Principle constituents : Flowers contain the alkaloid jasminine and the volatile oil of jasmine which contains benzyl acetate, linalool, linalyl acetate, benzyl alcohol, jasmone, indole, methyl anthranilate, phenols and bases with narcotic odours. Benzyl acetate $C_9H_{11}O_2$ is the chief constituent upto 65% of the oil , it was formerly given the name jasmal .

Uses : Volatile oil is used in cosmetics. Leaves are shewed for the treatment of mouth ulcers. Fresh leaf juice is applied to corn and poured in the ear in case of earache.

References : 1, 3, 10, 12, 21, 22, 26, 35, 38, 39, 54.



(199) JASMINUM OFFICINALE LINN.
OLEACEAE

English Name : Jessamine ,White flowered jasmine.

Local Name : ياسمين

Description : An ornamental semi evergreen, deciduous climber requiring support . Leaves opposite . Flower white . The plant is cultivated for the production of jasmine oil .

Part Used : Leaves, flowers and the natural volatile oil obtained from them.

Principle constituents : Flowers contain the same constituents of jasminum grandiflorum. They contain the alkaloid jasminine and the volatile oil of jasmine which contains benzyl acetate, linalool, linalyl acetate, benzyl alcohol, jasmone, indole, methyl anthranilate, phenols and bases with narcotic odours. Benzyl acetate $C_9H_{11}O_2$ is the chief constituent forming upto 65% of the oil , it was formerly given the name jasmal .

Uses : Volatile oil is used in cosmetics. Leaves are shewed for the treatment of mouth ulcers. Fresh leaf juice is applied to corn and poured in the ear in case of earche.

References : 1, 3, 10, 12, 21, 22, 26, 35, 38, 39, 54.





(200) JATROPHA CURCAS LINN.
EUPHORBIACEAE

English Name : Barbados nut, Purging nut, Physic nut.

Local Name : حب الملوك ، دند بري

Description : Shrub about 3 m high, deciduous. Leaves 3 - 5 lobed. Flower small yellowish - green. The plant was introduced and cultivated in Tripoli.

Part Used : Leaves, seeds and the seed oil.

Principle constituents : The seeds contain the toxalbumin curcin which is a phytotoxin stays in the cake and does not come out with the oil. It is similar to ricin of Castor seeds. The seeds contain also an unknown alkaloid. The fixed oil is a semi - drying oil contains toxic resinolipoid principle.

Uses : The oil and roasted seeds deprived of the pericarp are powerful purgatives. The activity of the oil is between that of castor and croton oil. The oil is used for illumination and soap manufacturing. The leaf - juice is used for wounds, eczema, scabies and as insect repellent. Latex is haemostatic. Bark is used in rheumatism and as fish poison. Nuts are used as arrow poison and the cake is used as manure.

The plant is irritant, it is toxic and causes nausea, vomiting, abdominal pains and diarrhea.

References : 1, 3, 10, 12, 21, 22, 26, 38.

(201) JUNCUS MARITIMUS LAM.
JUNCAEAE

English Name : Sea hard rush.

Local Name : حصيرة ، سمار ، حصير

Description : A densely tufted perennial rush 100 cm high or more with a short horizontal rhizome. Leaves few, dilated at the base into pale brown sheaths. Spike much repeatedly brnched, sessile 15 cm long. Capsules oblong.

The plant occurs in Benghazi, Tobruk, Kufra and Tripoli.

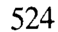
Part Used : Flowers

Principle constituents : The flowers contain gallic acid, chlorogenic acid, luteolin 7 - glucoside, luteolin 7 - 0 methyl ether 4 - glucoside, apigenin, 7 - 0 methyl ether 4 - glucoside and apigenin 7 - glucoside.

Uses : It is used as antisoriasis. Fibers are used in making mats.

References : 1, 11, 34.





(202) JUNIPERUS COMMUNIS LINN.

CONIFEREAE

English Name : Juniper, Common Juniper.

Local Name : عرعر ، عرعار ، حب العرعر
شيزي ، سروجلي

Description : A bush about 1 - 3 m. high either widely spreading or erect and almost spherical. Leaves are evergreen, short and pointed. Flowers are yellow very small, the males and females are on different trees. The cone is like a small green berry in the first year, becoming blue - black in the second.

The plant is common in Benghazi area.

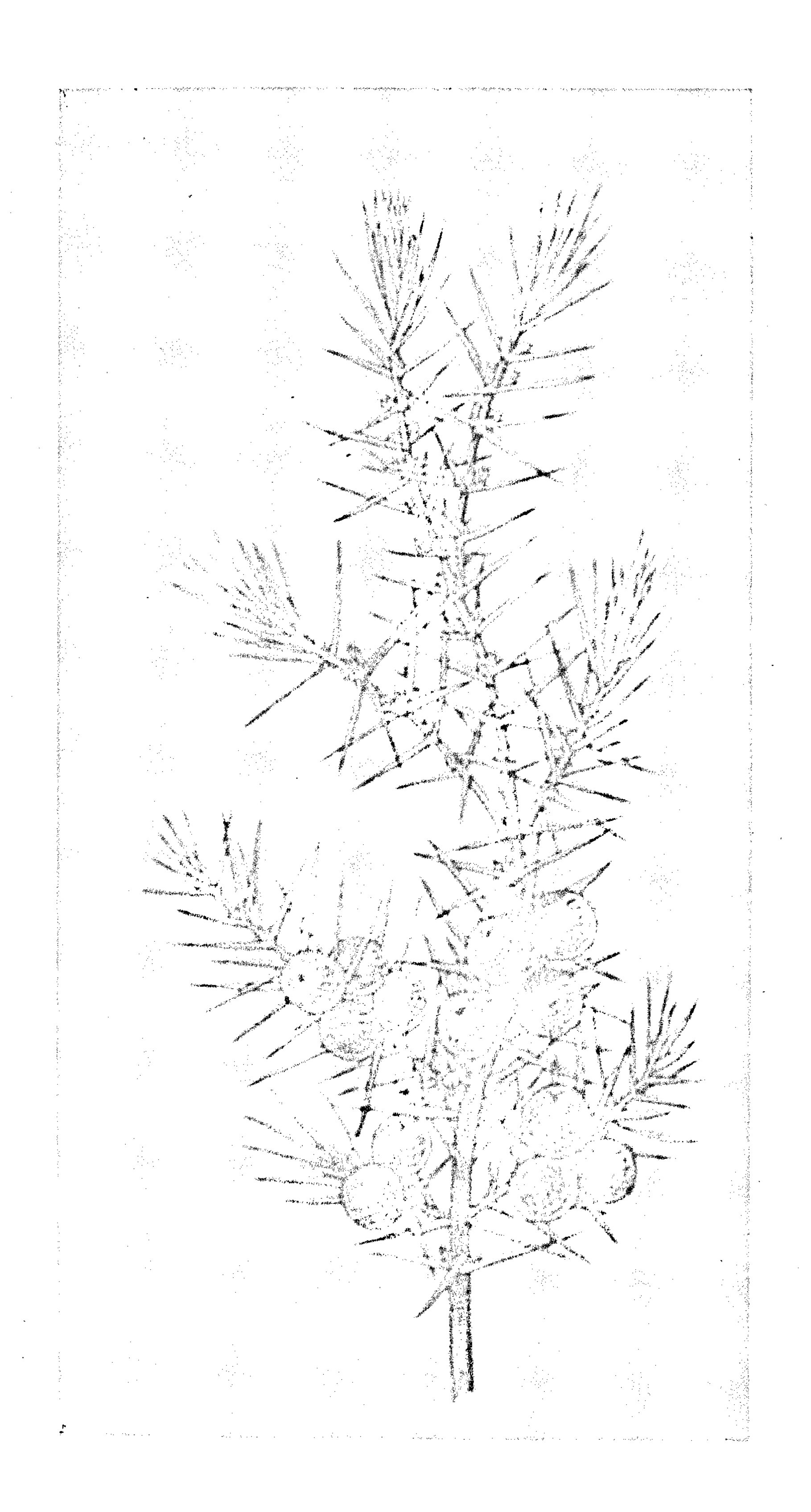
Part Used : Fresh ripe berries and their volatile oil obtained by steam distillation.

Principle constituents : Fruits contain volatile oil, fixed oil, resins, sugars, juniperin, wax, gum, pectin, organic acid and vitamins.

The oil contains alpha - pinene , camphene , cadinene , juniper camphor (sesquiterpene alcohol) , terpeneol and unidentified oxygenated compounds .

Uses : Aromatic, carminative, stimulant, antiseptic, emmenagogue, digestive and diuretic. The oil is powerful renal stimulant. Berries powder is rubbed on rheumatic and painful swellings. In Europe berries are used for the preservation of meat and preparation of juniper brandies (gin) also used in some pickles.

References : 1, 3, 12, 18, 20, 21, 24, 25, 26, 37, 38, 40, 43, 54.



(203) JUNIPERUS OXYCEDRUS LINN.

CONIFERAE

English Name : Brown berried juniper, Prickly junip Sharp cedar.

Local Name : عرعر ، حب العرعر

Description : A compact shrub or small tree, ornam Leaves awl - shaped in alternate whorls of 3. male and fe flowers on different trees.

Fruit ripens in 2nd year, shining, red - brown when Few trees are planted in Tripoli.

Part Used : Berries and oil obtained from the wood

Principle constituents : Volatile oil obtained by the dis tive distillation of the woody portions. The oil is known as ca contains sesquiterpenes, cadinene, phenolic compounds, gua ethylguaiacol and cresol.

Uses : Used in veterinary medicine in the treatment diseases.

References : 1, 3, 25, 38.



(204) LACTUCA SATIVA LINN.

COMPOSITAE

English Name : Garden lettuce, Head lettuce.

Local Name : خس ، سلاطه

Description : The most popular salad crop, almost grown in every garden. It is an annual small herb. Several varieties are known.

Part Used : Fresh leaves.

Principle constituents : Fresh leaves contain the bitter principle lactupicrin, minerals mainly calcium and iron, vitamins B 1, B 2 and C and carotene.

Used : It is used as nutrient and as a good source of iron and vitamins.

A tincture of the whole fresh plant is used in the treatment of impotency.

References : 1, 3, 10, 12, 21, 24, 39, 40.



(205) LACTUCA SCARIOLA LINN.
COMPOSITAE

English Name : Prickly lettuce, Wild lettuce, Oil lettuce.

Local Name : سلاطه ، خس الزيت ، بذر الخس

Description : An annual sometimes biennial weed with prickly alternate leaves similar to those of Dandelion. Flowers yellowish very small 1/2 cm in diameter occur 5 - 12 on much branched spikes.

The plant was introduced and cultivated in Tripoli.

Part Used : Seeds and milky juice.

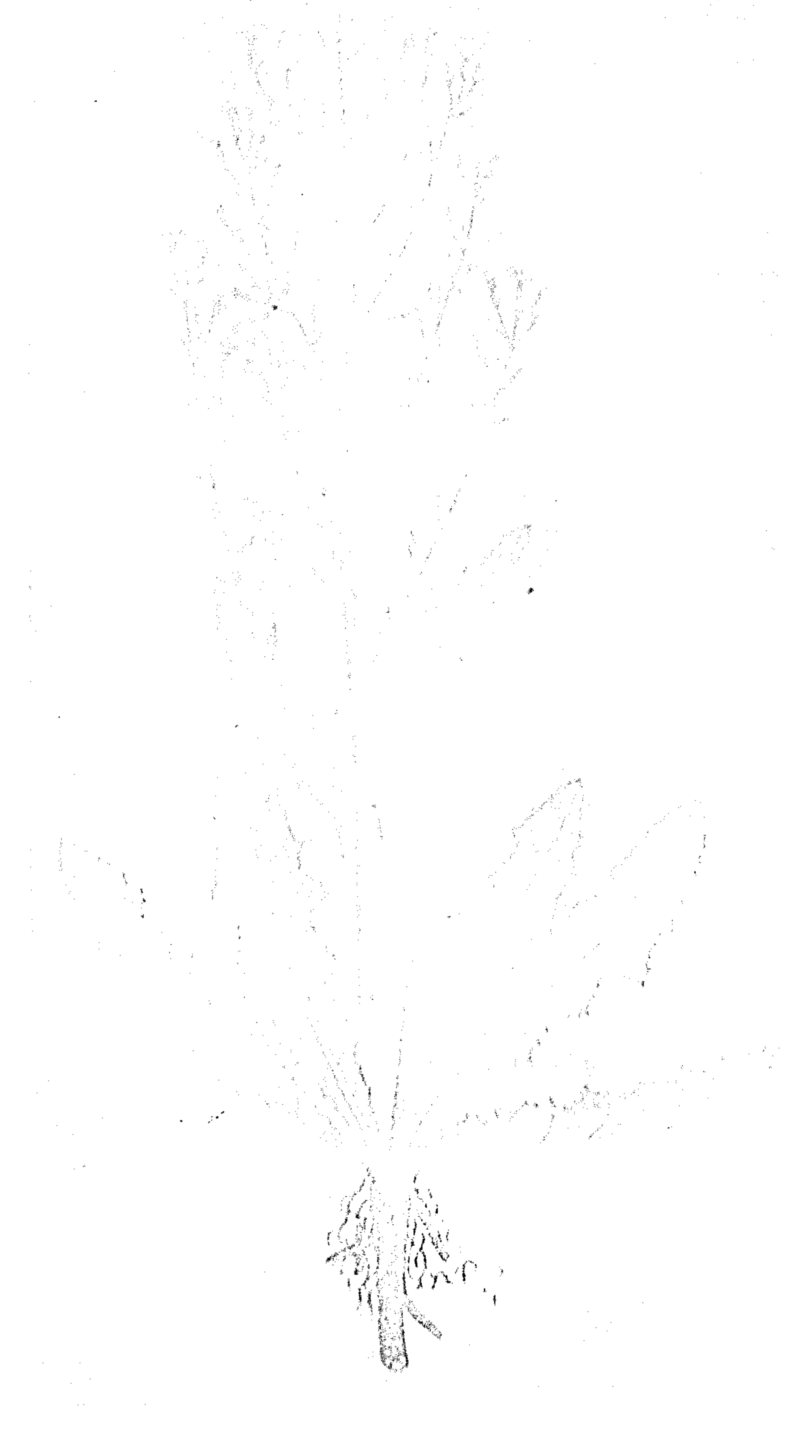
Principle constituents : The plant contains the compounds lactupicrin, lactucopicrin and the bitter principle lactucin.

It contains mannitol, albumin, the organic acids oxalic. malic and citric, the minerals iron and phosphorus. A mydriatic compound similar to hyoscyamine has been isolated from the plant.

Uses : Sedative, diuretic, expectorant, demulcent and refrigerant. Juice is used in nervousness and palpitation of the heart. Powdered seeds are used in asthma, cough and bronchitis.

The oil is hypnotic, antipyretic and is used as a cure for hair falling.

References :



(206) LACTUCA SERRIOLA LINN.
COMPOSITAE

English Name : Prickly - lettuce.

Local Name : لبينه ، خس البقر

Description : A binnial herb 60 - 120 cm high having brownish stem which is straight, leafy, sometimes spiny at the base and containing latex. Leaves glabrous, green - yellow, oblong sometimes lobed, they are weakly toothed at the margin but with strong teeth on the central vein. Flower heads are pale - yellow, narrow and very numerous.

The plant is common on waste grounds .

Part Used : Leaves and seeds.

Principle constituents : Contains bitter principles lactupicrin and lactucin.

Uses : Tincture of the seeds is added to cough mixtures as sedative. The plant is cooling, diaphoretic, diuretic, expectorant and used in treating asthma and pertussis .

References : 1, 2, 3, 4, 12, 21, 40.



(207) LAMIUM ALBUM LINN.
LABIATEAE

English Name : White dead - nettle, Blind - nettle.

Local Name : لاميون ،حرف أبيض

Description: A perennial plant with a creeping rhizome. Rigid square stem 15 -30 cm high. Leaves are soft, hairy, cordate, dentate. Flowers creamy white in axillary inflorescence.

The plant grows in Benghazi, Derna, Tobruk, Tripoli, Tarhuna and Garian.

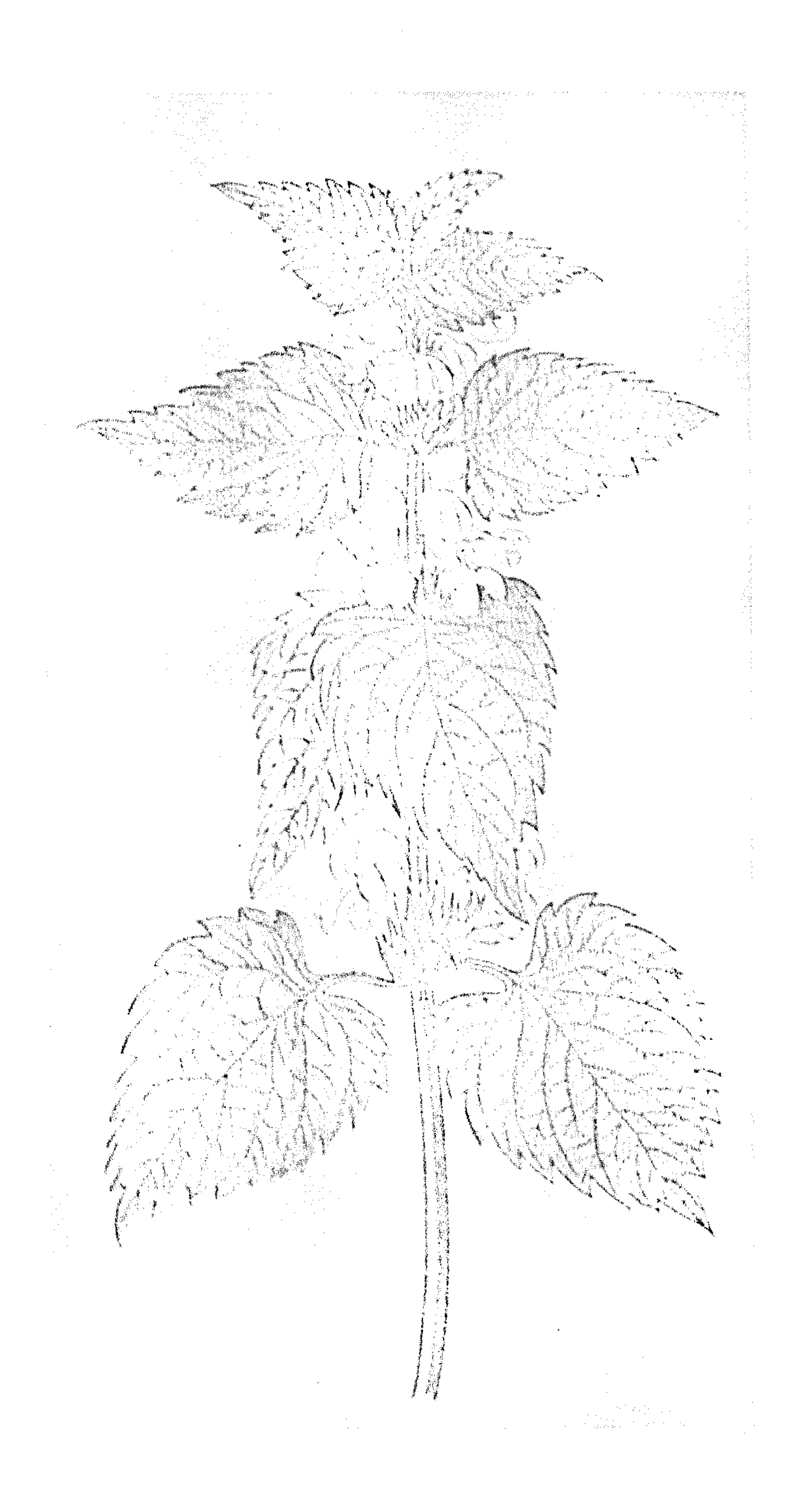
Part Used : Roots, flowering tops and dried flowers.

Principle constituents : It contains mucilage, tannin, flavonoid, glucosides, isoquercitrine, kaempherol, histamine, choline, tyramine and saponin.

Uses : Astringent, tonic, expectorant and haemostatic. Tincture is used to treat the inflammation of the respiratory system in case of bronchitis and dysmenorrhea. It stops uterus haemorrhage, inflammation of prostate and regulates menstruation.

References : 1, 3, 18, 21, 32, 38, 39, 40.





(208) LANTANA CAMARA LINN.
VERBENACEAE

English Name : Lantana, Wild sage.

Local Name : لانتانا

Description : An ornamental shrub with prickly stem up to one meter high with ovate - oblong toothed leaves hairy beneath. Flowers of different colours yellow, pink or orange.

Fruit fleshy drupe with two nuts.

Part Used : Herb.

Principle constituents : The herb contains the toxic triterpenoid lantadene A, the fish poison lantadene B and a greenish oil with pleasant odour. The roots and barks contain lantarrine (quinine - like alkaloid) with antispasmodic and antipyretic properties.

The plant contains volatile oil containing camerene, isocamerene and micranene.

Uses : The herb is expectorant and aromatic. The oil is used externally in skin itches. Leaves are stimulant and toxic.

The plant is toxic to livestock. It causes photo - sensitivity in animals. The fruits are toxic giving toxicity symptoms like that of atropine poisoning.

References : 1, 3, 10, 12, 14, 21, 26.



(209) LATHYRUS APHACA LINN.
LEGUMINOSAE

English Name : Yellow vetchling.

Local Name : حمام البرج ، بيقيه

Description : A common weed grows in wheat fields. Stem is prostrate or ascending. Pod is linear, flower with yellow corolla.

The plant occurs in Benghazi, Tripoli and most of the Jamahiriya.

Part Used : Ripe seeds.

Principle constituents : Not investigated.

Uses : The ripe seeds are said to be narcotic.

References : 1, 3, 21.



(210) LATHYRUS SATIVUS LINN.
LEGUMINOSAE

English Name : Chickling vetch, Bitter vetch.

Local Name : جلبان ، خلر

Description : A cultivated annual herb characterized by the short rhombical legumes 1 - 1.5 cm long, broad with upper margin winged. Flower large, violet blue with purplish keel and wings.

Seeds angled, smooth and yellow.

The plant grows in Ain Zara in Tripoli.

Part Used : Ripe seeds and their oil.

Principle constituents : Seeds contain a poisonous compound which is probably a salt of phytic acid. They also contain legumin, vicilin, legumelin, fixed oil, gum resin, saponin and two alkaloids in very small amounts.

Uses : The oil is a powerful and dangerous cathartic.

Seeds produce toxicity known as lathyrism.

References : 1, 3, 10, 21.



(211) LAURUS NOBILIS LINN.
LAURACEAE

English Name : Sweet bay , Laurel .

Local Name : رند ، غار

Description : Glabrous small evergreen tree or shrub. Leaves oblong or lanceloate, coriaceous, shortly petioled. Flower yellowish in axillary umbels of 4 -6. Fruit drupe, oval or elliptical, black when ripe. The plant grows in Benghazi and Tripoli.

Part Used : Berries and leaves without petioles.

Principle constituents : Fruits contain about 25 % fixed oil and 3 % volatile oil. Leaves are more rich in volatile oil contents which contains cineol, linalool and geraniol. They contain bitter principles and tannin.

Uses : Aromatic, digestive, stimulant and used as condiment. Formerly used for hysteria, amenorrhea and flatulent colic. As linament or ointment leaves are used as antirheumatics. Fixed oil is insecticide. In veterinary medicine leaves are applied externally to treat skin parasites (lice and fleas).

Leaf is used as food preservatives in food canning. Berries are used in Europe to promote miscarriage.

References : 1, 3, 20, 21, 24, 25, 38, 40, 54.



(212) LAVANDULA OFFICINALE CHAIX .
LABIATAE

English Name : Lavender.

Local Name : هنان ، خزامى

Description : A common garden plant with upright spikes of small aromatic blue or violet flowers. Leaves grey, aromatic, semi - evergreen.

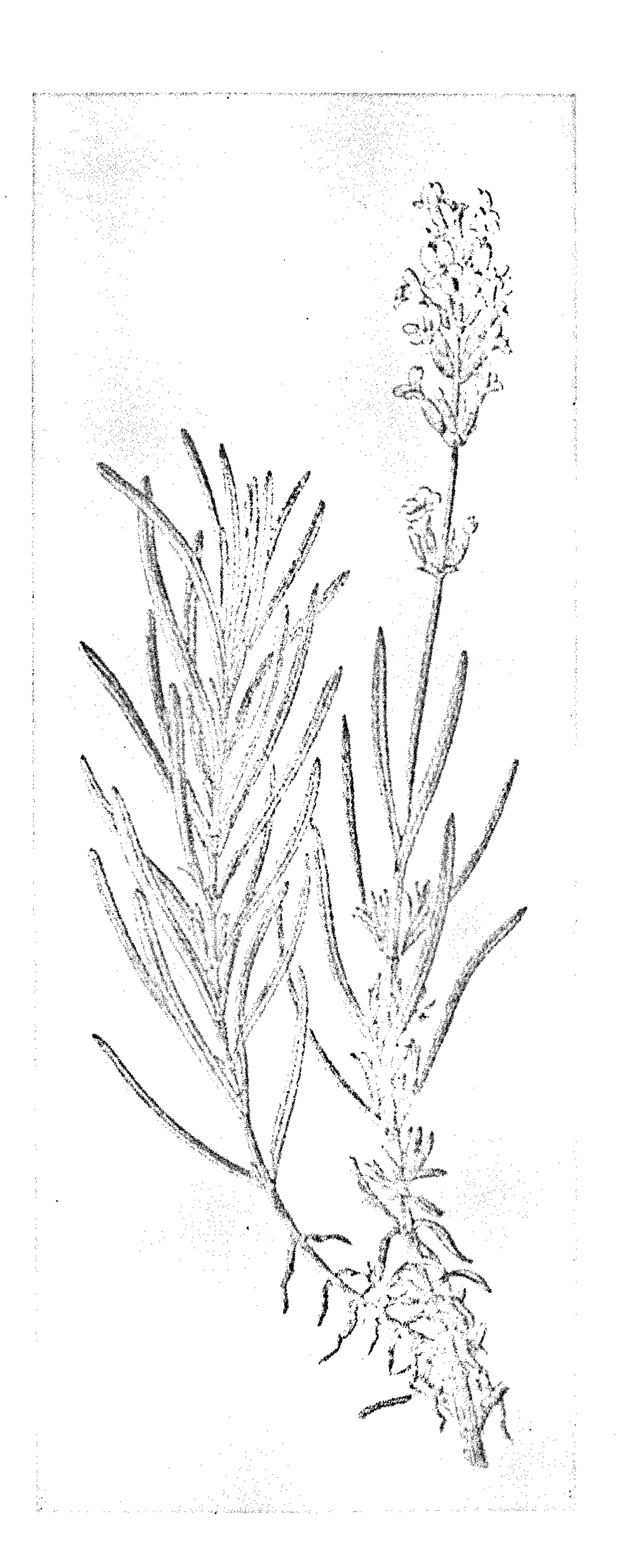
The plant is cultivated as ornamental.

Part Used : Flowers, flowering tops and the oil obtained from them.

Principle constituents : Volatile oil containing linalool, geraniol, borneol, linalyl acetate, camphene, caryophyllene, ocimene and herniarine which is hydroxy coumarine. The plant cotains glycollic acid which is hydroxy acetic acid $CH_2OH\ COOH$, tannin, rosmarinic acid and unknown bitter principle.

Uses : Flowering tops are diuretic. The flower is antispasmodic, carminative, antiseptic, stomachic and sedative. The volatile oil is mainly used in perfumery due to the presence of esters which improve the value of the bouquet. Leaves have antibiotic activity.

References : 1, 3, 10, 11, 12, 21, 25, 26, 38, 39, 40, 54.



(213) LAWSONIA INERMIS LINN .

LYTHRACEAE

English Name : Henna, Egyptian privet.

Local Name : حنا ، حناء

Description : A cultivated tree up to 5 m high with spinescent branches and elliptic lanceolate leaves. Inflorescence corymb forming terminal panicle. Fruit capsule dehiscent and indehiscent.

The plant is cultivated in Zawia and Tripoli.

Part Used : Dried leaves, leaf - juice and flowers.

Principle constituents : Leaves contain the pigment lawsone $C_{10}H_6O_3$ m. p. 190 dec . Which is hydroxynaphthaquinone compound , henna - tannin and flavonoid pigments . Volatile oil contains alpha and beta ionone and fat . Flowers contain resin . Seeds contain fixed oil .

Uses : Leaf decoction is antifungus, astringent, dye for hair, hands and feet and in cosmetics. Leaf - juice mixed with water and sugar is given as a remedy for spermatorrhea. Flowers are used in perfumery. Volatile oil is rubbed over the body to keep it cool.

References : 1, 3, 9, 10, 12, 14, 21, 25, 38, 54.



(214) LEONTICE LEONTOPETALUM LINN.
BERBERIDACEAE

English Name : Leontice, Lion's leaf.

Local Name : جبجاب ، ترشق ، عسلج ،رقف
خميره الدار ، راحة الأسد

Description : Smooth glabrous herbaceous plant. Stems bearing small leaves and racemes of small yellow flowers. Flower followed by bladder - like fruit. Roots tuberous.

The plant grows in Derna, Yefren, Jado and Zintan.

Part Used : Roots and leaves.

Principle constituents : The plant contains the alkaloids leonticine and petaline.

Leaves contain bitter principles.

Uses : Roots are crushed and rubbed on the breast when it swells and milk does not pass through the nipples. It is known to be used in epilepsy. Leaf decoction is tonic.

Ash of flower heads is applied to burns, mixed with curd is applied externally for itchy skin diseases. Root juice is poisonous.

References : 1, 21, 34.



(215) LEPIDUM SATIVUM LINN.
CRUCIFERAE

English Name : Pepper cress, Garden cress, Tongue grass.

Local Name : حب الرشاد ، رشاد ، حارة ، حرا

Description : A well annual or biennial plant cultivated everywhere as a salad plant. It has a characteristic smell. Leaves pinnate and glabrous. Flowers are very small with white petals. Seeds at one time was sold in Tripoli for medicinal purposes.

Part Used : Herb and seeds.

Principle constituents : Volatile oil known as cress oil, the glucoside glycotropaeolin which upon hydrolysis with myrosin gives benzyl isothiocyanate having an antibiotic activity. The seeds contain iodine, iron, phosphates, potash and uric acid.

Uses : Leaves are used in salads, as appetizer and mild laxative. It is local irritant and large doses produce abortion. Boiled with milk they are administered to cause abortion. The seeds should be eaten only when fresh. The plant is used in cases of asthma and cough as expectorant.

References : 1, 2, 3, 4, 10, 12, 21, 24, 38, 40.



(216) LINUM USITATISSIMUM LINN.
LINACEAE

English Name : Linseed, Flax.

Local Name : كتان ، بذر الكتان ، ملسج

Description : An annual herb 30 - 100 cm high. Leaves lanceolate with three main veins, glaucous green. Flowers bright blue, about 3 cm in diameter. Fruit is a globose capsule.

The plant is a field crop cultivated for the production of the seeds and seed oil.

Part Used : Seeds, seed oil and stems.

Principle constituents : Seeds contain mucilage, three cyanogenetic glycosides linamarin, lotaustralin and linocinnamarin, the phenolic glycoside lincaffein, enzyme linamarase, pectin, fixed oil and protein. The straw contains flavonoids and sterols.

Uses : The oil is demulcent, expectorant, emollient and laxative. Seeds are aphrodisiac. Oil cake left after expression of the seed is used as poultice, it dilates the local blood vessels, relaxes tissues then relieves tension and pain. Mucilage is dropped in the eye to treat conjunctiva and is prescribed in cough and cold. The oil is edible and used in paints (drying oil). Stem fibers are used in textile industry. Mummy cloth dating back to at least 2300 B. C. was made from flax.

References : 1, 3, 10, 12, 14, 20, 21, 25, 26, 33, 37, 38, 40.



(217)LIPPIA CITRIODORA ORT. AND PALAU.
VERBENACEAE

English Name: Lemon verbena, Herb louisa, Three leaved vervain

Local Name : لويزة

Description : An ornamental shrub grown as a green house plant for the lemon - scented fragrance of the leaves especially when crushed. Leaves opposite lanceolate short stalked, densely covered beneath with glandular dots about 8 cm long. Flower white produced in spikes.

Part Used : Leaves.

Principle constituents : The plant contains volatile oil having lemon odour and containing citral.

Uses : The plant is used as stomachic and digestive. Commercially the plant is used for the production of the volatile oil.

References : 1, 3, 38, 39.



(218) LIPPIA NODIFLORA RICH.

VERBENACEAE

English Name : Fog fruit.

Local Name : بليحه ، ليبيا

Description : A creeping herb with opposite gray leaves, small, subsessile about 2 cm long which turns brown in winter. Flower blue or rose - purple 1 cm across. Fruit globose oblong and dry. The plant forms a flat mat of foliage on the ground.

The plant grows in Ain Zara.

Part Used : Leaves and young shoots.

Principle constituents : The plant contains two glucosidic colouring matters nodiflorin A and nodiflorin B, bitter principles, volatile oil, resin, sugars and potassium nitrate.

Uses : The plant is used as cooling, demulcent, diuretic antipyretic and astringent. It stops pain of kneejoints. It is also used as poultice for boils and ulcers. A fumigation by the compression of the plant between two - redhot bricks gives relief in inflammed and bleeding piles.

References : 1, 3, 12, 20, 21.



(219) LITHOSPERMUM OFFICINALIS LINN.

BORAGINACEAE

English Name : Gromwell, Grummel, Pearl plant.

Local Name : كاسر الحجر ، حب القلب

Description : A perennial herb 40 - 80 cm high. Leaves numerous, lanceolate, glossy sessile. Flowers small, creamy - white arranged in a cyme. Seeds round, glossy resembling porcelain.

The plant grows in kussabat, Tarhuna, Garian and Benghazi area .

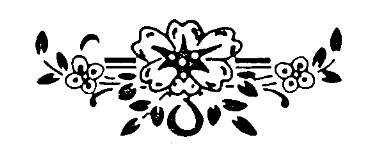
Part Used : Seeds and Leaves.

Principle constituents : The plant is rich in calcium and silicon. It contains shikonin, scyllitol, cyclitol, alkanin, caffeic and chlorogenic acids and tannins.

Uses : The plant was official in some pharmacopoeias. It produces hormonal activity and stops the activities of some hormones.

Seeds are diuretic and used in the treatment of kidney stones. Leaf decoction is used in Spain as sedative.

References : 1, 3, 21, 25, 38, 39, 40.





(220) LOLIUM TEMULENTUM LINN.

GRAMINEAE

English Name : Darnel, Rayegrass, Ivray.

Local Name : زوان ، شيلم ، دنقه ، صامه

Description : An annual grass about 70 cm high. Leaf blade is up to 30 cm long, linear accuminate, glabrous, sheath is also glabrous .

The plant grows both in Tripoli and Benghazi areas.

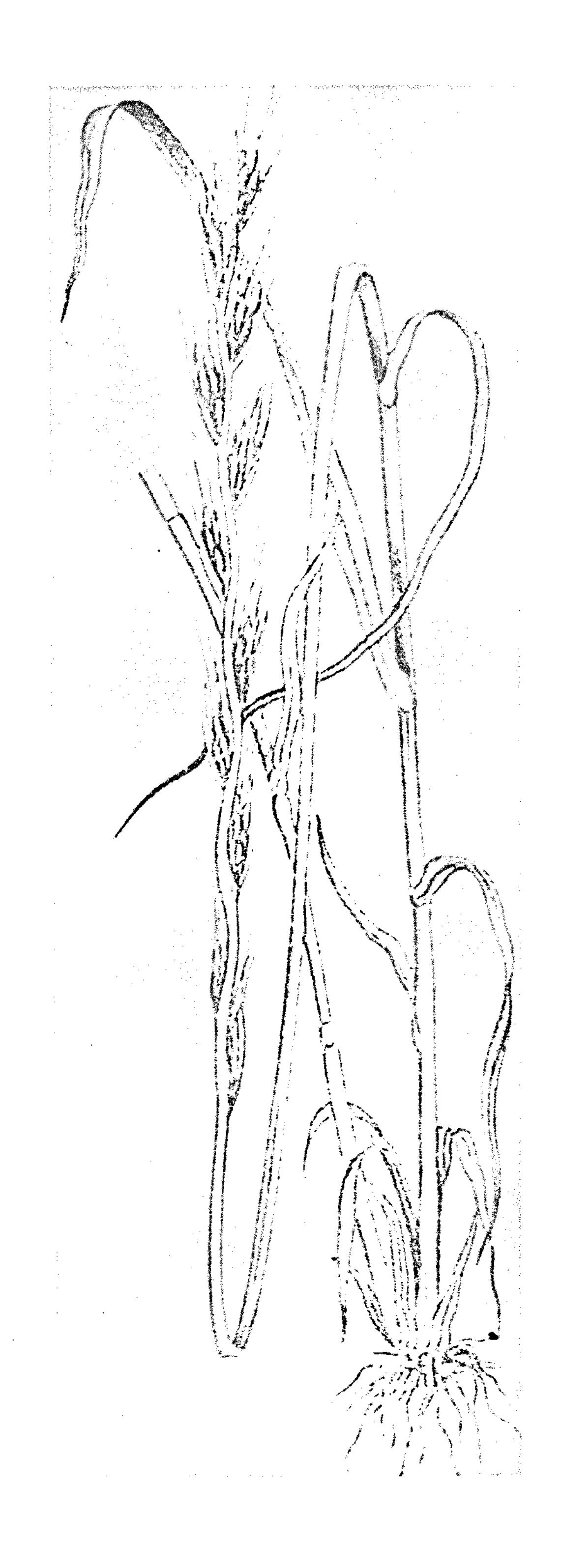
Part Used : Fruits and seeds.

Principle constituents : The alkaloids, loliine which is volatile, perloline, temuline, temulentine and femuline. The plant contains enzymes, silicic and temulentic acids.

Uses : The plant is narcotic and mydriatic due to the presence of temuline. Seeds are used as poultice in skin diseases. The plant is toxic. Temulentine and temulentic acid produce brain paralysis.

Toxicity symptoms appear as dilation of eye pupils, dizziness, heart weakness, convulsions, colic, unconsciousness, sleepness, vomiting, weakness in hearing, respiratory paralysis and mental confusion.

References : 1, 2, 3, 4, 10, 12, 14, 21, 22, 23, 33, 38, 40.



(221) LOTUS CONRNICULATUS LINN.
LEGUMINOSAE

English Name : Babies' slippers, Bird's foot trefoil.

Local Name : قرن الغزال ، رجل العصفور ،كتايه
شدرة

Description : A perennial herb about 60 cm high, sometimes grown as a ground cover of forage, usually decumbent. Leaves with 3 leaflets .

Flowers yellow or tinged with red about 2 cm in diameter. The plant occurs in Tripoli and Benghazi areas.

Part Used : The entire plant.

Principle constituents : It contains cyanogenetic glycosides.

Uses : The plant is astringent. It promotes healing of wounds. It is an excellent forage.

References : 1, 2, 3, 12, 21, 22, 38.



(222) LUPINUS ALBA LINN.
LEGUMINOSAE

English Name : White lupine.

Local Name : ترمس

Description : An annual herb cultivated for the production of the fruits. Leaves alternate, palmately compound. Fruits pea - like pods.

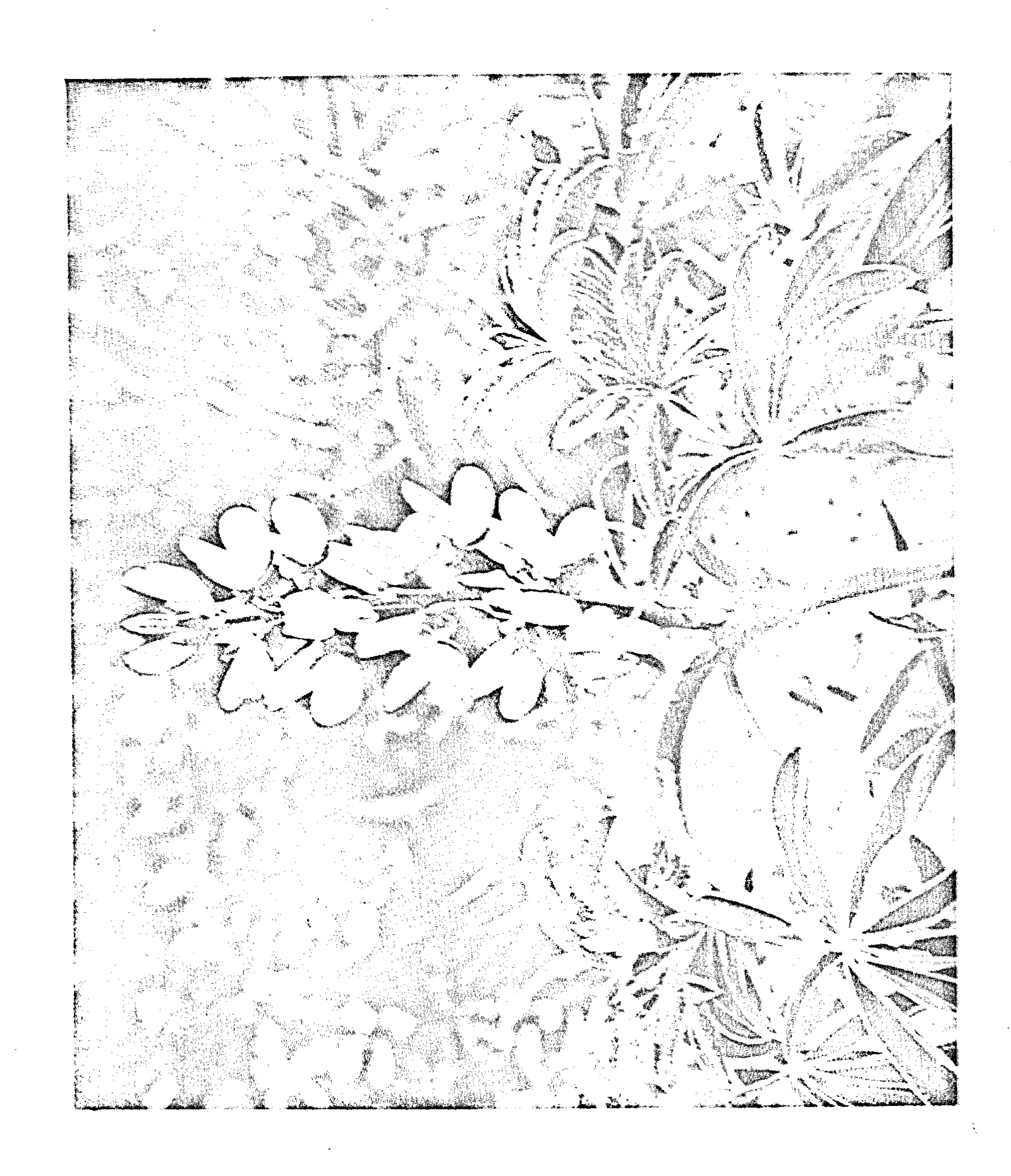
Part Used : Seeds, stems and fruits.

Principle constituents : Alkaloids of the quinolizidine group , lupine, lupinine, lupinidine, lupanine, hydroxylupanine, asparagine, sparteine, legumine, lupinic acid, cholesterol and resins.

Uses : Carminative, anthelmintic, diuretic, emollient, pectoral and tonic. Lupanine which is a derivative of sparteine is used in cases of myocardia and arterial fibrillation. Powdered seeds in the form of cataplasma is used to treat ulcers. Lupine shows hypoglycemic activity. Seed decoction reduces blood pressure. Lupinine is diuretic.

Seeds are used in veterinary medicine in treating skin diseases.

nces : 1, 3, 19, 20, 21, 22, 32, 33, 41.



(223) MAJORANA HORTENSIS MOEN.

ORIGANUM MAJORANA LINN.

LABIATAE

English Name : Sweet marjoram.

Local Name : مردقوش ، مرزنجوش
بردقوش ، ريحان داوود

Description : An annual biennial or perennial plant depending on the habitate. It reaches a height of 15 -40 cm. Tomentose with erect branching stems. Leaves small and rounded. Flowers small white or pink in a corymb. The plant emits a characteristic aroma, it is cultivated as a condiment.

Part Used : The flowering plant without the root.

Principle constituents : The plant contains volatile oil containing terpinol, geraniol, eugenol and linalool.

Uses : Flavouring agent, condiment, antispasmodic, carminative, very mild laxative, used in cases of amenorrhea and in perfumery. The oil relieves toothache and applied into carious teeth.

The plant is used in case of asthma and cold. Mixed with myrtus communis is used as hair tonic.

References : 1, 3, 12, 21, 39, 40, 54.



(224) MALVA PARVIFLORA LINN.
MALVACEAE

English Name : Cheese weed, Small flowered mallow.

Local Name : خبيزة ، ارقيقه

Description : An annual plant 10 - 30 cm high. Sometimes hairy with ascending stems and dentate cordate leaves.

Flowers pink in colour.

The plant is common as a weed in most of the cultivated areas.

Part Used : Leaves and seeds.

Principle constituents : Not investigated.

Used : Boiled leaves are used to wash skin eruptions. They are diaphoretic and emmenagogue. Leaf infusion is nerve tonic. It is used as douche for uterine troubles and as eye lotion.

Seeds are demulcent used in coughs and bludder ulcers. It produces narcotic poisoning in animals.

References : 1, 2, 3, 10, 12, 14, 16, 21.



(225) MALVA SYLVESTRIS LINN.
MALVACEAE

English Name : Common mallow, Wood mallow.

Local Name : خبيزه ، خبـازي ، دهماء

Description : A perennial creeping herb reaching about one meter. Leaves tomentose. Flowers pink - purple 4 cm in diameter with 5 narrow petals. The plant grows as a weed in the cultivated areas and waste places all over Jamahiriya.

Part Used : Flowers and leaves.

Principle constituents : The plant contains mucilage, minerals, tannin and the vitamins A, B 1 , B 2 and C, anthocyanin which upon hydrolysis gives the colouring genin malvidol.

Uses : The herb is demulcent due to the large amount of mucilage. It is also emollient and antiseptic. It is applied externally for swellings and abscesses. Flowers and green fruits are used in whooping cough. Leaves are nutrient. They are official in Swiss Pharmacopoeia. Leaves are used as infusion and flowers as gargle.

References : 1, 2, 3, 12, 20, 21, 22, 40.



(226) MARRUBIUM VULGARE LINN.
LABIATAE

English Name : White horehound, Horehound.

Local Name : روبيه ، فراسيون ابيض ، حشيشة الكلب

Description : A woody perennial herb with erect, rigid stem 30 - 50 cm high. Leaves rounded, weakly dentate, groups along the stem. The plant smells rather like thyme.

It grows in Tripoli, Benghazi, Shahat and in many places in Jamahiriya.

Part Used : The herb while flowering without roots.

Principle constituents : Contains the bitter principle marrubin $C_{20} H_{28} O_4$ m. p. 160 C°, volatile oil, tannin, saponin glycoside, ursolic acid, sterols, choline, sesquiterpenes and unknown alkaloid most probably stachydrine.

Uses : In the form of tea the plant is used to cure cough, sore throat, and cold. It is expectorant and stomachic. The tincture is used in case of gastro - intestinal troubles. It is claimed to be hypoglycemic and cholagogue. Leaf tincture is used externally for treating some skin diseases.

References : 1, 2, 3, 12, 21, 22, 25, 33, 38, 39, 40, 43.



(227) MATRICARIA CHAMOMILLA LINN.
COMPOSITAE

English Name : Chamomile, German chamomile.

Local Name : بابونج ، بابونش ، كميله ، قميله ، فليه
تفاح الأرض ، كموميله

Description : An annual glabrous aromatic plant branching from the base with bipinnatisect leaves. Leaf lobes linear setaceous, mucronate. Head 15 - 20 mm. in diameter. Radiate on long peduncles.

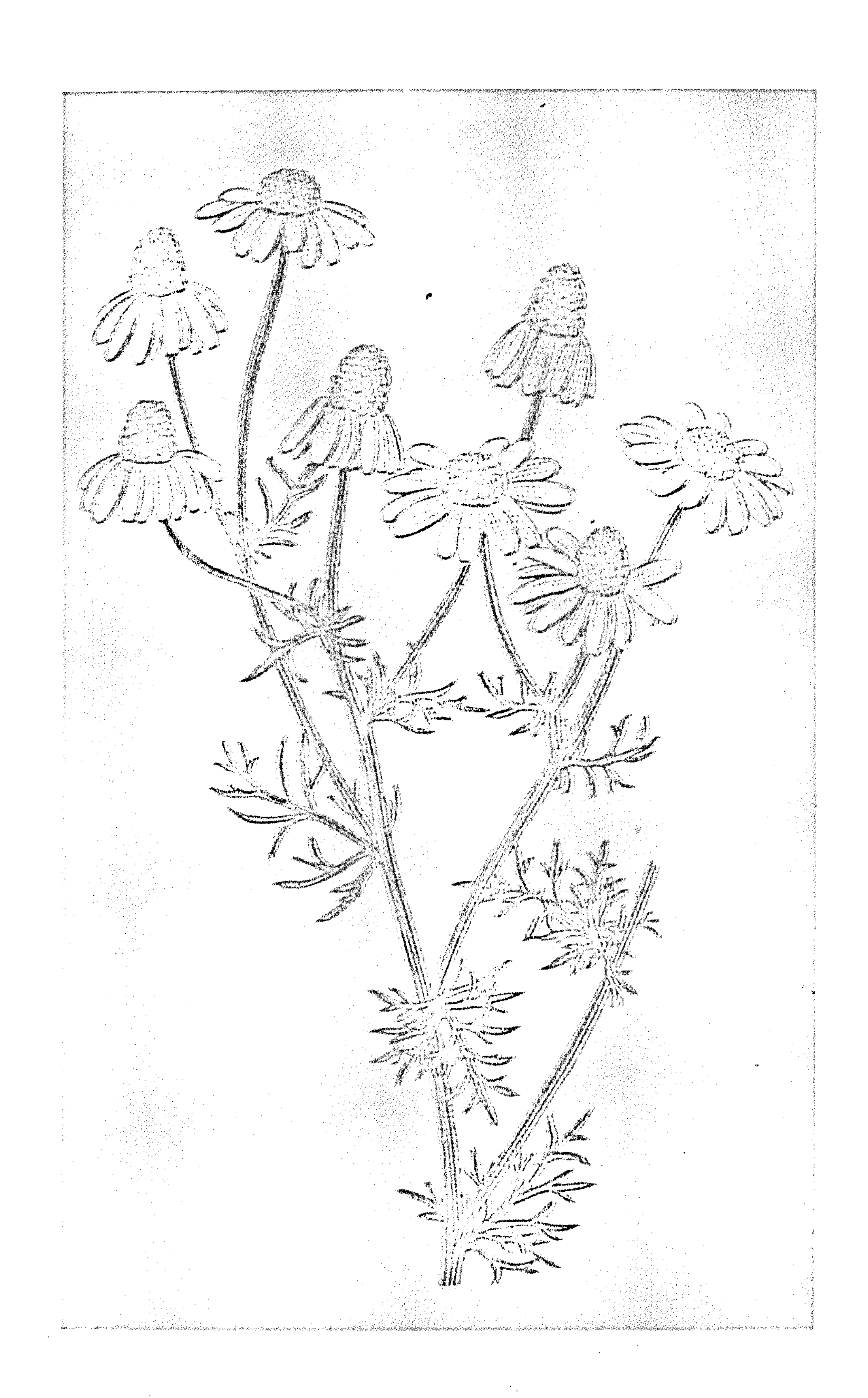
The plant grows in many of the waste areas in the Jamahiriya.

Part Used : The flower heads and volatile oil obtained from them.

Principle constituents : The flower heads contain a blue volatile oil containing azulene known also as chamazulene, farnesene and alpha - bisabolene . They contain also dihydroxycinnamic acid , anthemidine , tannin , matricin which is the precursor of azulene , herniarin and flavonoid glycosides palustrine , quercetol and apigenin which is tryhdroxyflavone .

Uses : Carminative, antispasmodic, aromatic, sedative, tonic, diaphoretic, stomachic, urinary and respiratory antiseptic and mild laxative. It is used for stomach disorders. As worm infusion it is emetic. It is also used for sore throat, diphtheria, rheumatism, sciatica, gout, lumbago and eye inflammation. Externally it is used for eczema, skin inflammation and skin ulcers. It gives the hair a golden tint in addition to being hair tonic. It is used to flavour cigarettes.

References : 1, 2, 3, 4, 14, 20, 21, 22, 25, 26, 37, 38, 39, 40, 43, 54.



(228) MEDICAGO SATIVA LINN.
LEGUMINOSAE

English Name : Lucerne, Alfalfa.

Local Name : صفصفا ، نفل ، برسيم حجازي
قصب

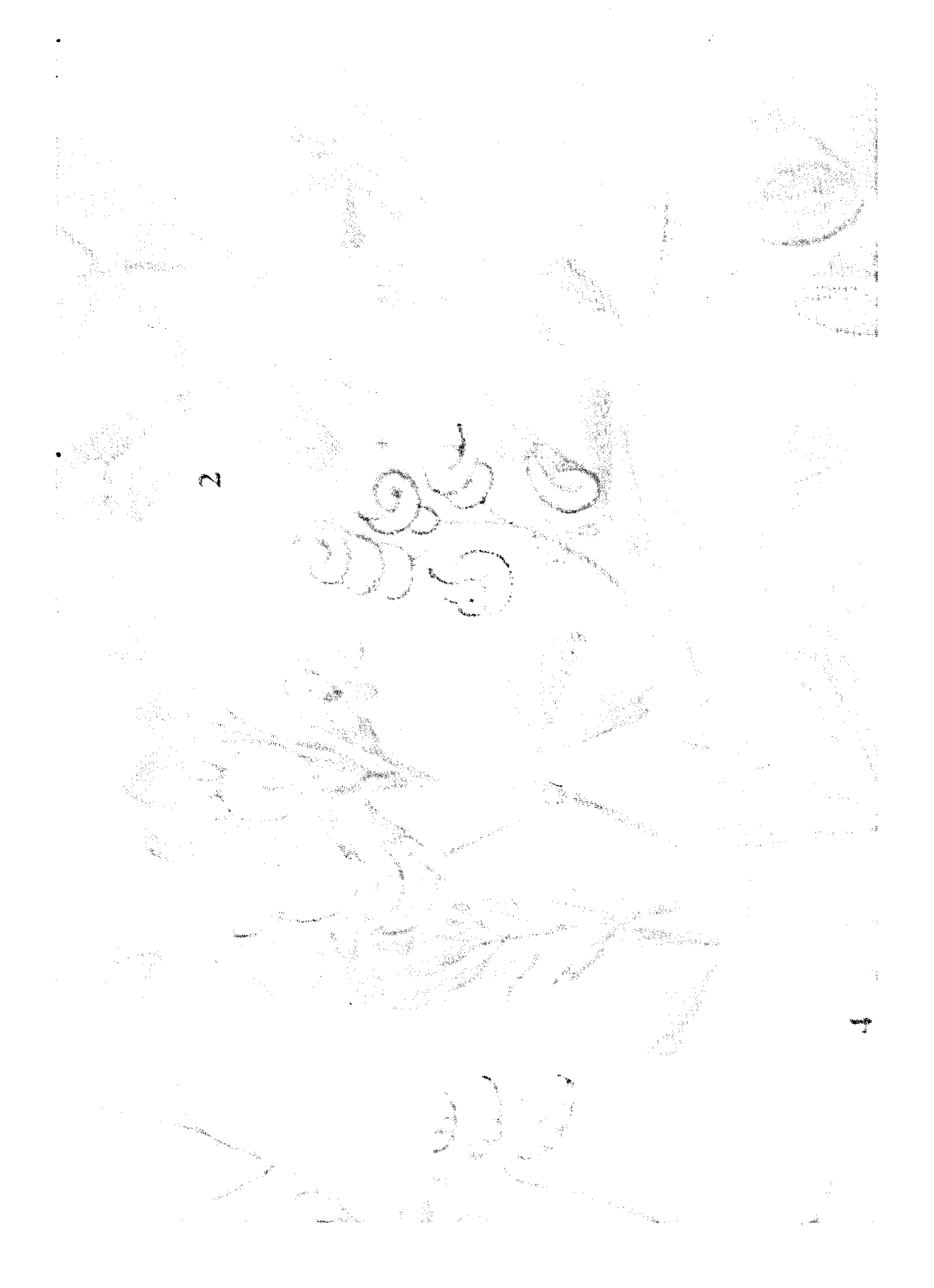
Description : A perennial glabrous herb 30 - 80 cm high. The underground stem is often lignified. Leaves trifoliate and dentate. Flowers blue - violet in an inflorescence. There are numerous cultivated varieties. Size and colour of flowers differ according to the variety. The plant is cultivated as forage crop.

Part Used : The herb.

Principle constituents : The plant contains triterpene saponin $C_{27} H_{37} O_{16} N$, bitter principle , sapogenin medicagenic acid , flavones , choline , betaine , stachydrine , homostachydrine , trigonelline , cavanine which is alpha - amino guanidinoxy butric acid , rutin , myriston , carotene , vitamins mainly A , B 1 , B 2 , D , E and K , minerals mainly calcium , potassium and phosphorus . Seeds contain a yellow dye and a brown drying oil .

Uses : The plant is used mainly as fodder. Seeds are diuretic, abortifacient and it is claimed to be of value in arthritis. Commercially the plant is used for the production of carotene, chlorophyll and vitamin K. The plant is also used as antihaemorrhagic and antianemic but it causes photosensitization and renal troubles.

References : 1, 3, 14, 22, 33, 40, 57.



(229) MELALEUCA LEUCADENDRON LINN.
MYRTACEAE

English Name : Cajeput oil tree, Punk tree, Swamp tea tree.

Local Name : كايبوت ، شجرة البيضاء

Description : An ornamental tree with evergreen leaves. Leaves are 5 - 10 cm long. Flowers creamy white borne in terminal spikes 15 cm long. Flowers looks like a bottle brush because of their long stamens.

Part Used : Fresh leaves, twigs and bark.

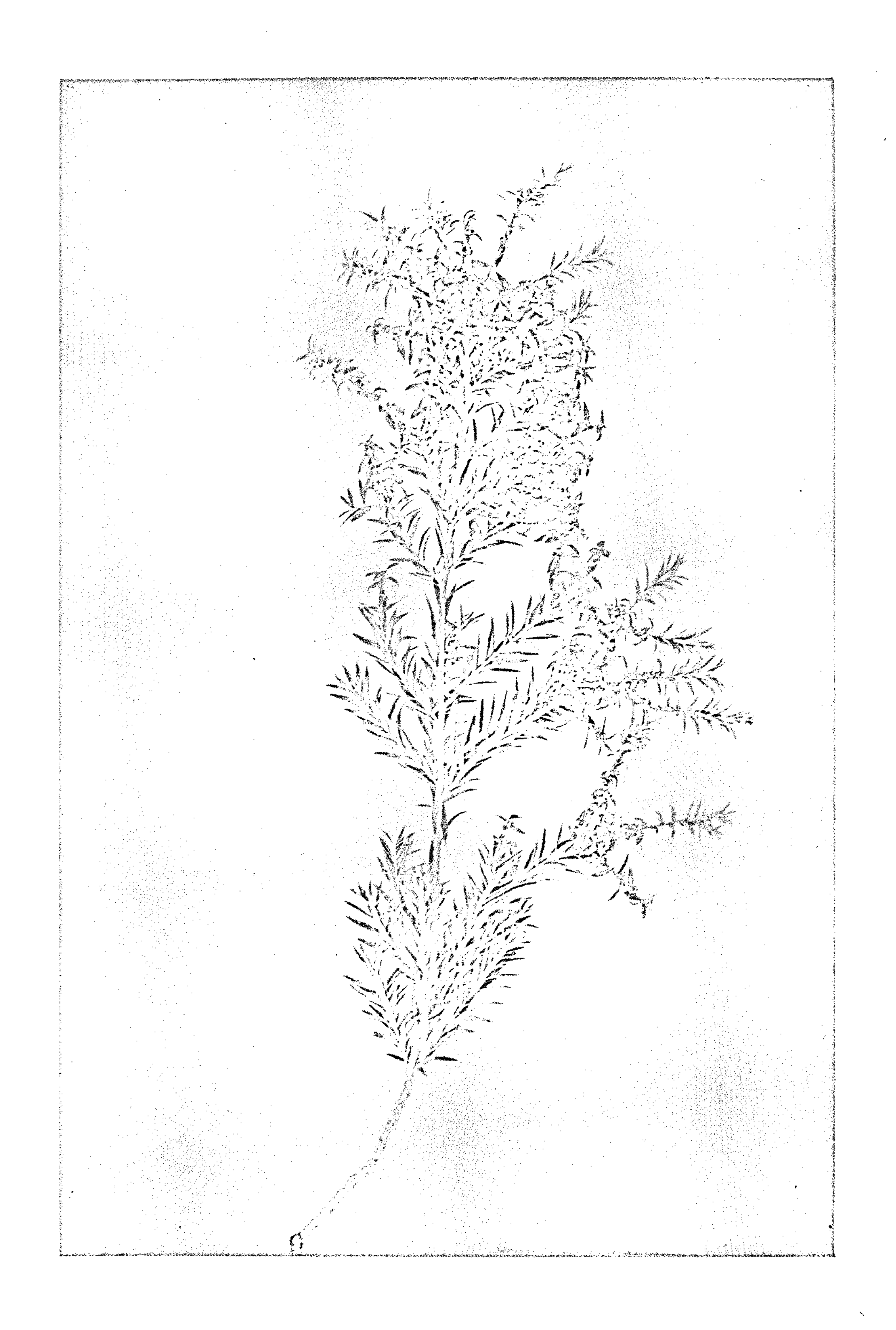
Principle constituents : Leaves and twigs contain volatile oil about 40 - 60 % contains cajuputol which is identical with eucalyptol. The oil contains also eugenol, methyl iso - eugenol and elemicin.

Bark contains the crystalline resinol melaleucin.

Uses : The oil distilled form fresh leaves and twigs is used internally and externally in rheumatism and as antiseptic. It is also used in cases of diarrhea. Externally it is used for acne, eczema and as mosquito repellent.

The bark is tonic and stimulant.

References : 1, 3, 21, 25.



(230) MELIA AZADIRACHTA LINN.
MELIACEAE

English Name : Margosa, Neem, Nim tree.

Local Name : زنزلخت ، شجرة حرة ، سباحيه

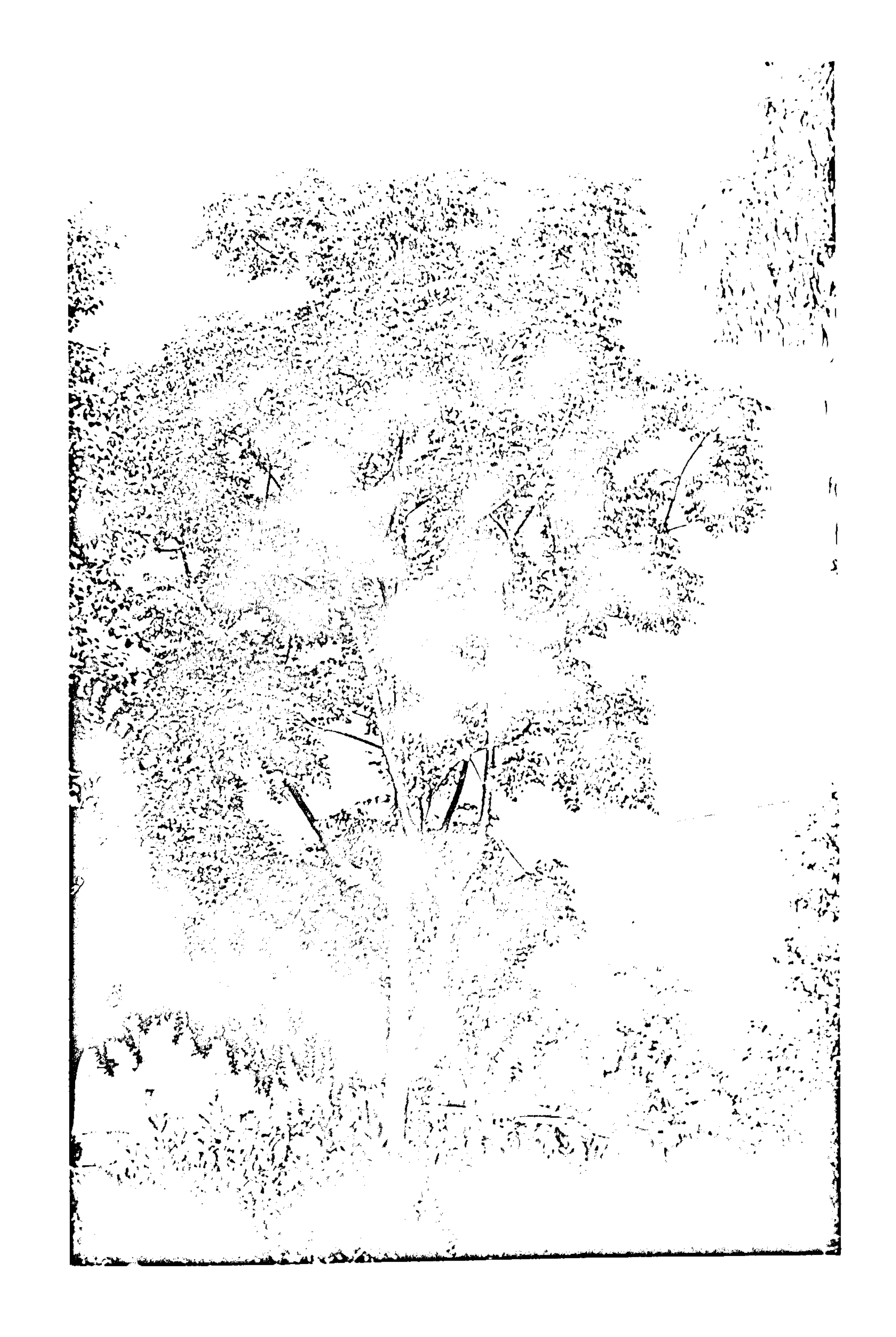
Description : Introduced tree of medium size 6 - 15 m high. Flowers in axillary panicles 15 - 30 cm long white, honey - scented. Fruit oval, purple 1 - 2 cm long. It is a garden plant.

Part Used : Bark, leaves, fruits, seeds and gum.

Principle constituents : The plant contains tetracyclic trit-terpenoid azadirachtin , alkaloids azaridine , margosine and paraisine , resins , tannins and the crystalline compound baka-cactone $C_{22}H_{26}O_4$ m. p. 215 - 16 C° . Bark contains bitter principle mangrovin , nimbinin , nimbidin , nimbosterol and volatile oil containing sulphur . Leaves contain an insect repellannt meliatin . Seeds contain fixed oil with disagreable taste .

Uses : The bark is bitter tonic, astringent, antipyretic, allays thirst nausea and vomiting. Externally it is used for eczema and skin lesions. Gum from the bark is sedative. Leaves, fruit and bulb are used in skin diseases. Fruits are purgative, emollient, good for intestinal worms and urinary diseases. Infusion of the heart - wood relieves asthmatic attacks, emetic and cathartic. Root - bark is anthelmintic. Oil is used externally to relieve convulsions and nervous pains. It is also used in paintings and as hairtonic. Over - dose causes stomach irritation, nausea, vomiting and diar-rhea.

References : 1, 3, 10, 12, 13, 21, 28, 33.



(231) MELIA AZEDARACH LINN.
MELIACEAE

English Name : Chinaberry tree, China tree, Bead tree, False sycamore.

Local Name : سباحية

Description : An ornamental tree 9 - 15 m high cultivated in Tripoli (Ben Gashir). Flowers fragrant, purple or lilac. Fruit, drupe nearly globular containing a bony seed. Leaves bi - pinnate. The vernacular name sebahai is due to the seeds which resemble the beads (Sebha) used by Muslims.

Part Used : Leaves, bark and flowers.

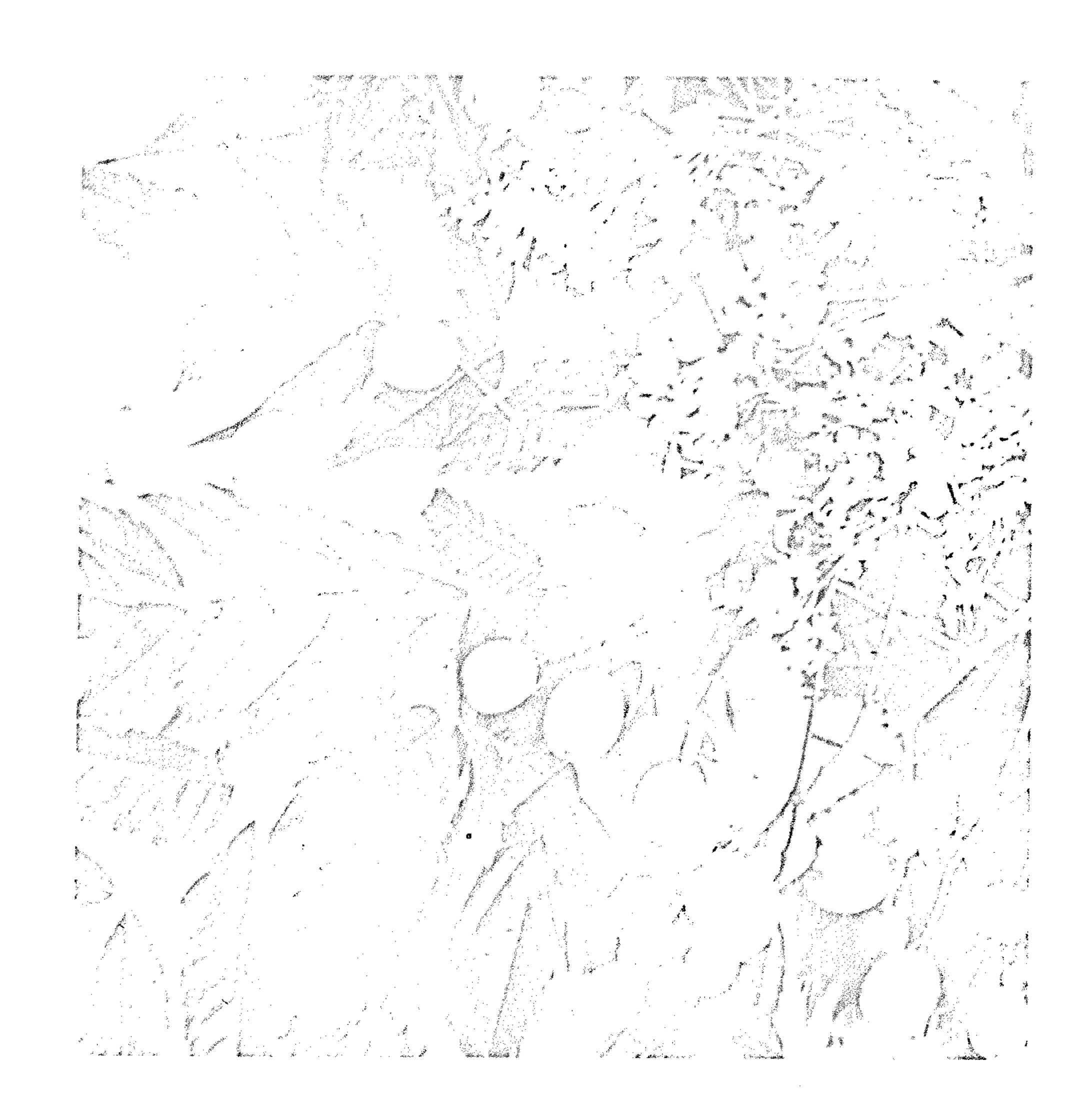
Principle constituents : The coumarins scopoletin, 6 - hydroxy - 7 - methoxycoumarin and aescultin, terpenes, steroids, cinnamic acid , beta - sitosterol , compasterol and two unidentified sterols $C_{29}H_{50}O$ and $C_{29}H_{46}O$.

Uses : The plant is deadly poisonous. Fruits cause severe irritation, nervous symptoms and fatty degeneration of the liver and kidneys. Toxicity is due to the resionous fraction.

Leaves and their juices are antilithic, diuretic and emmenagogue. Root bark is anthelminitic.

Seeds are prescribed in rheumatism.

References : 1, 3, 7, 11, 12, 18, 21, 26.



(232) MELILOTUS INDICA LINN.
LEGUMINOSAE

English Name : Indian melilot, Scented - trefoil

Local Name : حندقوق بستاني

Description : An annual plant 20 - 40 cm high . Stems erect , much branched . Leaves pinnately trifoliate , petioled . Flowers yellow .

The plant is common in the cultivated areas.

Part Used : Herb.

Principle constituents : The plant contains coumarin.

Uses : The plant is emollient. Leaf infusion is applied as fomentation on swellings.

It is used in India in cases of bowel complaints and infantile diarrhea.

It is indirect anticoagulant. The plant causes nausea, Vomiting and heart depression.

References : 1, 2, 3, 4, 10, 14, 21, 22.



(233) MELILOTUS OFFICINALIS WILLD.

LEGUMINOSAE

English Name : Melilot, Honey lotus, King's clover, Common melilot, Sweet clover, Yellow miller, Moon seed.

Local Name : إكليل الملك ، نفل ، شندقوره ، حندقوق

Description : An annual or perennial plant erect or spreading branching from the base with trifoliate leaves. Leaflet stalked with toothed margin. Flower yellow in clusters. Fruit glabrous transversely wrinkled, minute, brown when ripe.

The plant is common in the cultivated areas all over Libya.

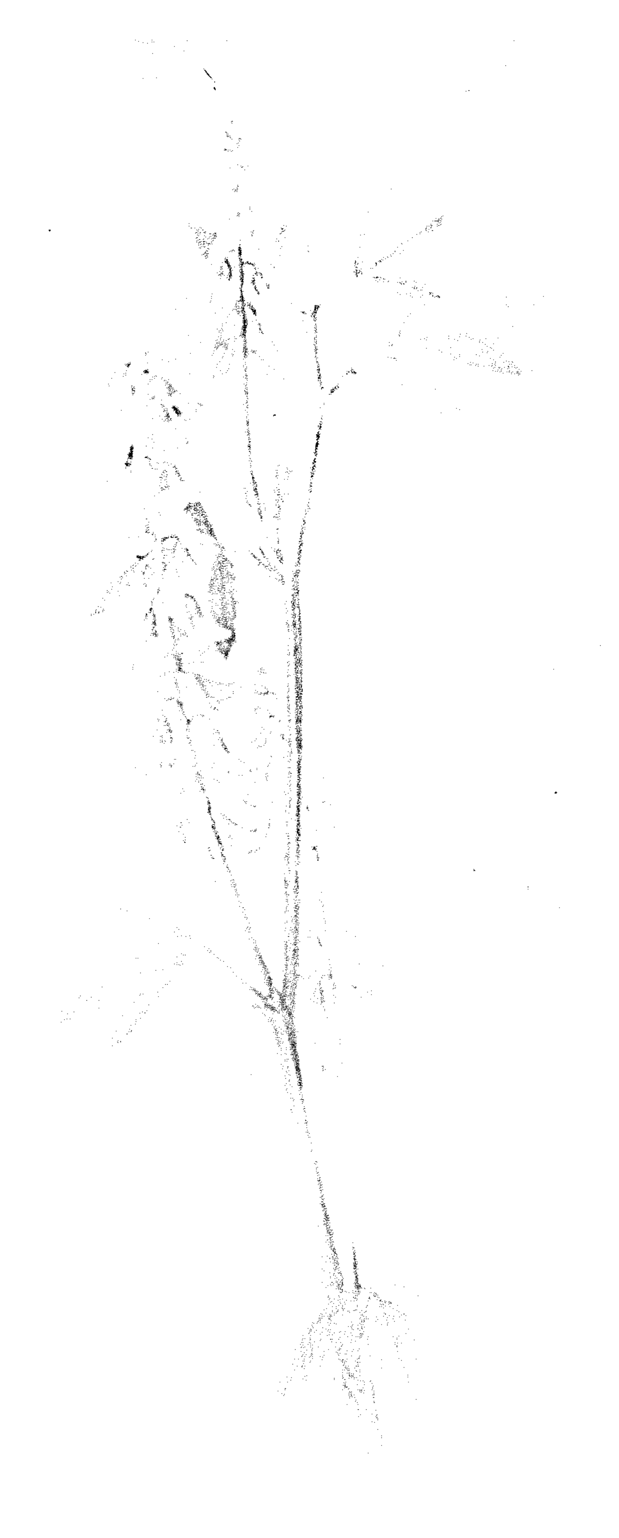
Part Used : Leaves, seeds and flowering tops.

Principle constituents : The plant contains coumarins (dicoumarol, dicoumarin and hydrocoumarin), the glycoside melilotoside which on drying produces coumarin, coumaric and melilotic acids, melilotic flavones, resins and alkaloids. Flowers contain volatile oil and seeds contain fats.

Uses : The plant is aromatic used to improve the flavour of medicines. It is emollient, carminative, diuretic, antispasmodic, sedative, styptic, astringent, anticoagulant and urinary antiseptic. It is taken internally to relieve flatulence and in cases of insomnia in infants. In the form of cigarettes the herb is used to treat asthma. It has antidiabetic activity. Externally it is applied as fomentation or poultice for pains and aches. Seeds are active as a broad spectrum antibiotic.

The plant is toxic to animals causing haemorrhage then death.

References : 1, 3, 14, 19, 20, 21, 22, 26, 38, 40, 41, 44.



(234) MENTHA AQUATICA LINN.
LABIATAE

English Name : Water mint, Fish mint.

Local Name : حبق الماء ، حبق التمساح

Description : A variable, pubescent perennial plant. Leaves oval, dentate, elongate. Flowers in a rounded terminal inflorescence red to pale lilac in colour. The plant is normally found along the streams and damp places. It is an indicator of the presence of water.

Part Used : Leaves and the volatile oil

Principle constituents : Volatile oil and tannin.

Uses : Carminative, antispasmodic and cholagogue. The oil is used for flavouring mentholated cigarettes and tooth pastes. It is also used to dissolve stones in the bladder and kidney.

In alcoholic medium the oil acts as a heart and nerve stimulant (not yet proved .

References : 1 , 3 , 12 , 21 , 22 , 40 .



(235) MENTHA PIPERITA LINN.
LABIATAE

English Name : Mint, Peppermint.

Local Name : نعنع ، نعناع ، نعناع فلفلي

Description : A well known perennial plant smelling strongly of menthol. Stem is quadrangular and purplish. Leaves dark green or purplish. Flowers lilac in an apical inflorescence. The plant is largely sterile but reproduces by means of stolons. It is cultivated as a condiment herb.

Part Used : Leaves and flowering tops and their volatile oil

Principle constituents : Volatile oil containing menthol, menthyl acetate, cineole, lemonene, phellendrene, menthone, cadinene, and amyl alcohol. The plant contains tannin resins and flavonoids.

Uses : Carminative, stimulant, aromatic, cholagogue antiseptic, antispasmodic, analgesic and allays nausea, vomitting and flatulance.

The oil in large doses is aphrodisiac. It is widely used as a flavouring agent in chewing gums, food industry and in perfumery.

References : 1, 3, 12, 14, 21, 22, 24, 25, 26, 37, 38, 39, 40, 43, 54.



(236) MENTHA SPICATA LINN.
LABIATAE

English Name : Common green mint, Spearmint.

Local Name : نعنع بلدي ، نعناع بلدي

Description : A perennial cultivated mint, spreading by creeping rootstalks in moist soil. Stems are quadrangular. Leaves opposite nearly sessile, toothed 7 cm long.

Flowers small in whorls on spikes about 10 cm long.

Part Used : Leaves and their volatile oil

Principle constituents : Volatile oil the constituents of which are almost similar to those of peppermint oil but spearmint oil contains more carvone and less menthol than peppermint oil.

Uses : As Mentha piperita but it is mostly used in the manufacturing of chewing gums, tooth pastes and food products.

References : 1, 3, 21, 22, 24, 25, 26, 39.





(237) MERCURIALIS ANNUA LINN.
EUPHORBIACEAE

English Name : Annual mercury.

Local Name : بوصنصير ،حلبوب ، خصي هرمس

Description : An annual plant about 45 cm high. It has a branching stem and lanceolate pale green glabrous leaves. Male and female flowers usually occur on different plants.

The plant grows in Tripoli, Ajedebia, Marj and Benghazi area .

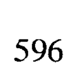
Part Used : Herb.

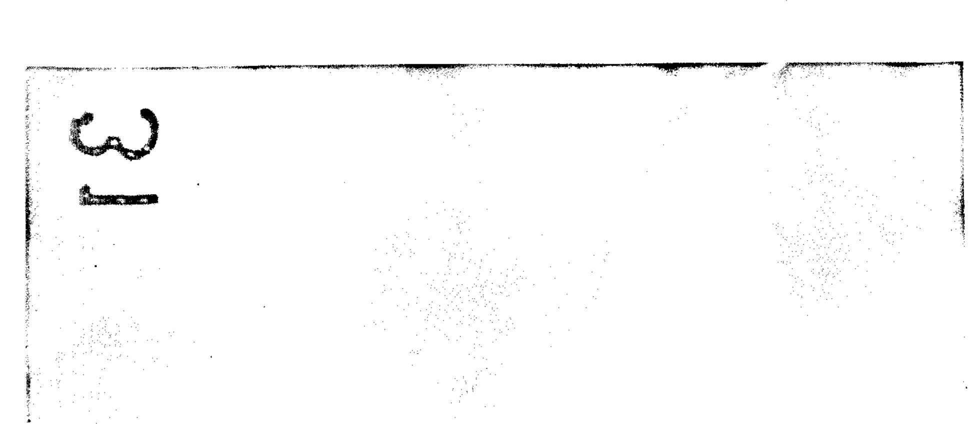
Principle constituents : The plant contains volatile oil, saponins, bitter principles, organic amines and the alkaloid murcurialine .

Uses : Herb is diuretic and purgative. The oil causes severe gastoenteritis in man and livestock. Leaves cause hey - fever (bronchial asthma or rhinitis ·, they are also poisonous.

References : 1, 2, 3, 19, 22, 33, 38, 40.







(238) MIRABILIS JALAPA LINN.
NYCTAGINACEAE

English Name : Four O'clock plant, Marvel of peru.

Local Name : ورد الليل ، نوار الليل

Description : Annual or perennial cultivated ornamental herb. Flowers red, white or yellow, fragrant, funnel - shaped 2 - 5 cm long, open at 4 O'clock in the afternoon and close in bright sun. Root tuberous. Stem soft and succulent.

The plant was reported in Benghazi and Derna.

Part Used : Leaves and roots.

Principle constituents : The herb contains the alkaoid trigonelline, oxymethyl anthraquinone and resins.

Uses : Roots are purgative. At night the flower of the plant exhales a strong odour which is said to stupefy and drive away mosquito. Fresh leaf - juice is applied locally to relieve itching of articaria. Internally it is used for gonorrhea and uterine discharges. Powdered seed is used in cosmetics.

The plant is known to have anticancer activity. Roots and seeds cause gastroenteritis in children.

References : 1, 3, 10, 21, 22.



(239) MORUS LINN.

MORACEAE

M. alba	**white mulberry**	توت ابيض ، توت بلدي
M. nigra	**black berry , sycamine**	توت شامي ، توت أسود

Description : Cultivated tree with alternate, often irregularly lobed leaves with staminate and pistillate catkins either on the same tree or different trees. Fruit edible, very sweet of poor keeping quality. Silk worm feeds on the leaves.

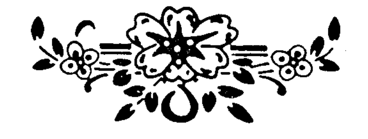
Part Used : Fruits, leaves and bark.

Principle constituents : Not investigated.

Uses : The fruit is nutrient, cooling, mild laxative and allays thirst and fever. It is used in sore throat dyspepsia and melancolia. The bark is astringent, purgative and vermifuge.

Leaves are used as gargle in cases of inflammation of vocal cords. They are known to be antidiabetic.

References : 1, 3, 21, 41, 44.



(240) MUSCARI COMOSUM LINN.
(241) MUSCARI MARITIMUM DESF.
LILIACEAE

English Name : Fair haired hyacinth, Tassel hyacinth.

Local Name : كيطوط ،بصل الذئب ، بصل المسك

Description : A bulbous plant with narrow and lance - shaped leaves 3 cm wide. Flower small, ballshaped in racemes at the end of an erect spike , blue or violet in colour .

The plant grows in Gubba, Benghazi, and Derna.

Part Used : The overground parts.

Principle constituents : The plant contains traces of the alkaloid colchicine, It is known to contain mucilage.

Uses : The overground parts are edible, eaten as food usually with Spinach. It is good for stomach as it removes acidity.

The species maritimum is a good lactagogue for animals. Flowers as poultice reduces body temperature.

References : 1, 3, 50.



(242) MYRTUS COMMUNIS LINN.
MYRTACEAE

English Name : Myrtle, Common myrtle.

Local Name : جدره ، حب الآس ، مرسين
فام ، ريحان

Description : Dense evergreen aromatic shrub 1 -2 m high. Much branched from the base. Leaves ovate lanceolate. Flower solitary white and axillary. Fruit purple - black ovoid berry becomes bluish and black when ripe. The plant is common in Tripoli and Benghazi areas.

Part Used : Leaves, berries and the volatile oil.

Principle constituents : Berries contain volatile oil, fixed oil , resins and tannins . The oil contains alpha - pinene , comphene , dipinene , myrtenol , cineole , geraniol and nerol .

Uses : The plant is stimulant, astringent, flavouring agent and used in culinary purposes. Leaves and berries are used as antidiabetic, in eczema, epilepsy, wounds and ulcers. Berries are carminative. Volatile oil is antiseptic for the respiratory system, it is given in cases of diarrhea, dysentery, haemorrhage, rheumatism and in mouth washs. Fixed oil from berries promotes hair growth. A thermolabile active principle resembling streptomycin in action on mycobacterium tuberculosis has been reported in the plant.

References : 1, 3, 12, 14, 20, 21, 25, 38.



(243) NASTURTIUM OFFICINALE R. BROWN
RORIPA NASTORTIUM RUSBY.
CRUCIFERAE

English Name : Water cress.

Local Name : كرسون ، ابو خنجر ، رشاد
قره العين

Description : A perennial aquatic plant floating or rooting in the shallow bottom of cold streams with odd - pinnate leaves 1 -4 pairs of leaflets with small white flowers in racemes.

The plant grows in Ghat, Tarhuna, Shahat and Derna.

Part Used : Fresh seedlings before flowering.

Principle constituents : Contains the glycoside gluconasturin $C_{15}H_{20}KNS_2$ $9H_2O$, bitter principle , vitamins C and E and minerlas iodine and iron .

Uses : The plant decoction is used as diuretic and in case of bronchitis. Externally it is used in certain skin diseases as burns and acne. It promotes hair growth. The herb is stomachic, antiscorbutic, aphrodisiac and assists menstruation. It is ecbolic, abortifacient and used as oral contraceptive. Seeds are used in salads as Mustard seeds and as antidote to nicotine in case of nicotine poisoning.

References : 1, 2, 3, 8, 10, 16, 21, 24, 38, 40.



(244) NERIUM OLEANDER LINN.

APOCYANACEAE

English Name : Oleander, Common oleander, Rose bay.

Local Name : ورد الحمار ، دفله ، دفلى ، تفلى
تفله

Description : An ornamental shrub 1 -4 m. high with hard stem branching from the base. Leaves lanceolate opposite and whorled. Flowers terminal in cluster having different colours mostly pink. Corolla lobed. Fruit is a capsule.

Part Used : The glycosides obtained from the whole plant.

Principle contituents : Several glycosides the majority are steroidal, oleandrin, neriodorin, neriin, cortenerin, nerianthin, cornevin , folinerin , rosagenin which is like strychnine in action , rutin and the alkaloid pseudocuranine . The steroidal glycosides are derivatives of gitoxigenin .

Uses : The plant glycosides are used in the treatment of heart diseases as a substitute for Digitalis glycosides. Bark powder is a rat poison and used as parasiticide. Dried leaves are rubbed upon afflicted parts for headache or neuralgia. The plant is very toxic ,causing sweating, lack of apetite, colic, dilation of the pupil of the eye, slow and irregular heart action, convulsions, bloody diarrhea, drawsiness, unconsciousness then death.

References : 1, 2, 3, 10,14, 21, 22, 26, 33, 39, 54.



(245) NICOTIANA GLAUCA R. GRAH.
SOLANACEAE

English Name : Indian tobacco, Tree tobacco.

Local Name : عكوز موسى ، عصا موسى ، عكوز النبي
مصاص

Description : A perennial tree like plant 2 - 3 m high. Leaves glaucous - blue, ovate, long petiolate. Flower 4 - 5 cm long yellow in terminal panicle. The plant grows wildly every - where in waste areas.

Part Used : Leaves and overground parts.

Principle constituents : The alkaloids anabasine which is a liquid non volatile alkaloid , nornicotine and traces of nicotine . The glycoside rutin about 2% and scopoletin .

Uses : The plant itself is not used but the isolated anabasine is used as insecticide. Rutin is used as anticappillary fragility together with vitamin C. The plant is poisonous to cattle either fresh or dry.

References : 1, 3, 10, 21, 21, 25, 32, 33, 38, 39, 54.



(246) NICOTIANA TABACUM LINN.
SOLANACEAE

English Name : Tobacco.

Local Name : تبع ، دخان ، دخن

Description : An annual plant up to 170 cm high. The stem is erect and little branched. Leaves elliptic, lanceolate, wrinkled, the lower ones are petiolate. Flowers are long - tubed trumpets, pink or red.

The plant is cultivated in Homs for the production of tobacco leaves.

Part Used : Cured leaves.

Principle constituents : Leaves contain the alkaloids, nicotine, nor - nicotine and anabasine which are liquid non volatile, nicotelline which is a crystalline alkaloid and other minor alkaloids. The leaves contain nicotianin which is a pungent compound known as tobacco camphor and is formed during the process of curing, betaine, asparagin, tannin, resin, the glycosides tahacinin, tahacilin and isoquercitrin, enzymes, nicotimine, myrosmine, anatabine, methyl pyrrolidine, piperidine, pyrrolidine, rutin, caumarin and scopoletin . Seeds contain semi - drying fixed oil and allantioin $C_{26} H_{44} O$ m. p. 134 - 5 C° .

Uses : Tobacco was formerly used medicinally because of its narcotic, nerve sedative, diaphoretic and emetic properties. It is now used mainly for smoking. Nicotine sulphate is used as insecticide and in treating some skin diseases, 40 - 60 mg of nicotine is fetal.

References : 1 , 3 , 12 , 17 , 21 , 22 , 24 , 25 , 26 , 27 28 , 33 , 39 , 40 , 54 .



(247) NIGELLA DAMASCENA LINN.
RANUNCULACEAE

English Name : Damascus field fennel, Love in a mist, Devil in a bush.

Local Name : كمون اكحل ،كمون أسعد ، حبه البركه
حبة سوداء

Description : An annual cultivated herb with finely divided alternate leaves, much branched. Flowers about 5 cm in diameter, light blue or white with surrounding threadlike bracts.

Fruits globelike.

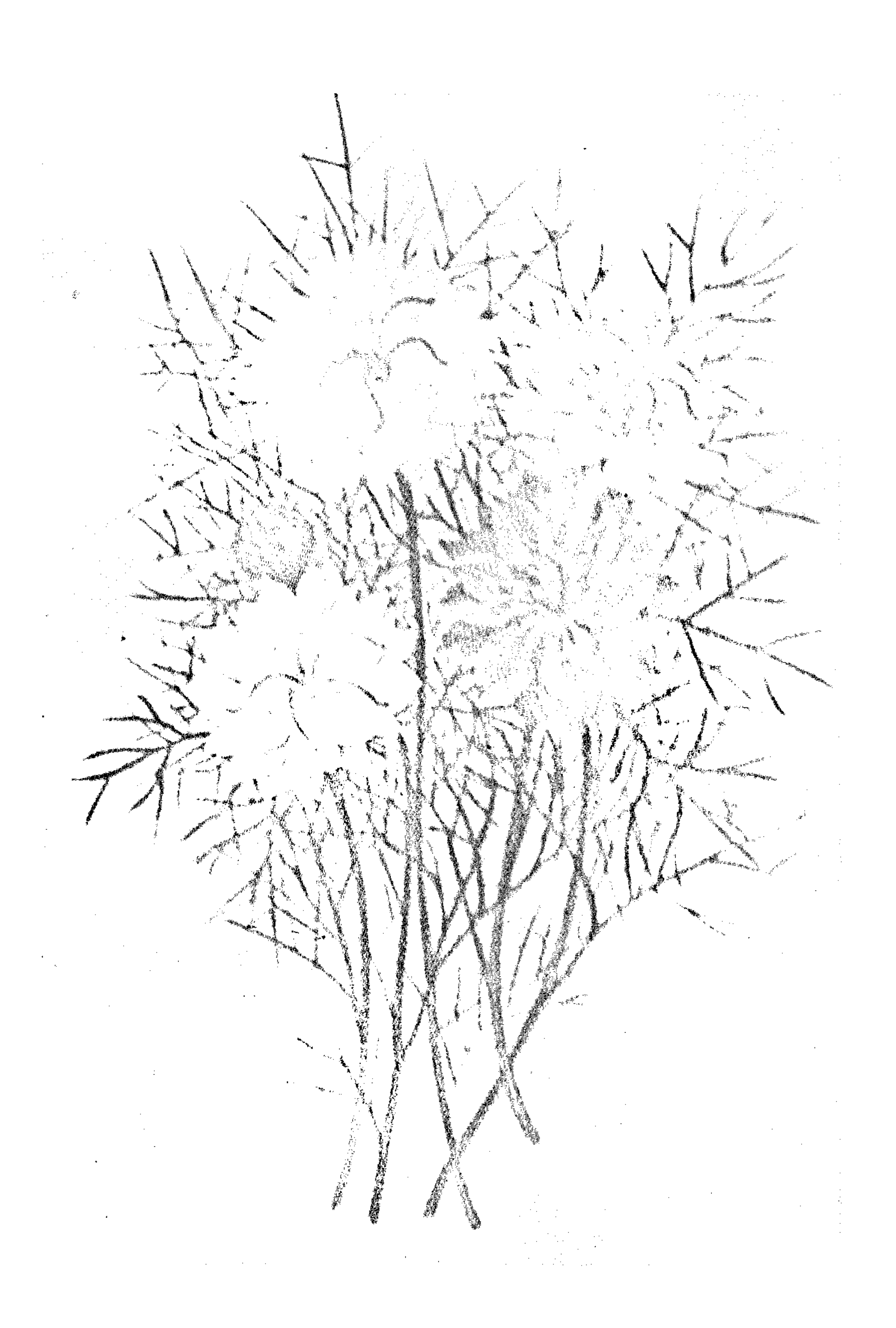
Part Used : The grains and their volatile oil

Principle constituents: Contains saponins, volatile oil, fixed oil, glycoside melanthin and the alkaloid damascenine.

Uses : The alkaloid is hypotensive, stops the contraction of smooth muscles, reduces fever, and used as spice. Damascenine is antispasmodic, emmenagogue and lactagogue.

References : 1, 3, 11, 12, 21, 32, 33, 38, 40, 54.





(248) NIGELLA SATIVA LINN.
RANUNCULACEAE

English Name : Black cummin, Small Fennel, Fennel flower, Fitches, Nutmeg - flower.

Local Name : كمون أكحل ،كمون أسعد ،حبه سوداء حبه البركة

Description : An annual plant 30 - 50 cm high leaves are finely pinnate, flowers are blue, star - shaped. The capsule is green when young and brownish when ripe and contains dark grey seeds.

The plant is cultivated for the production of the seeds.

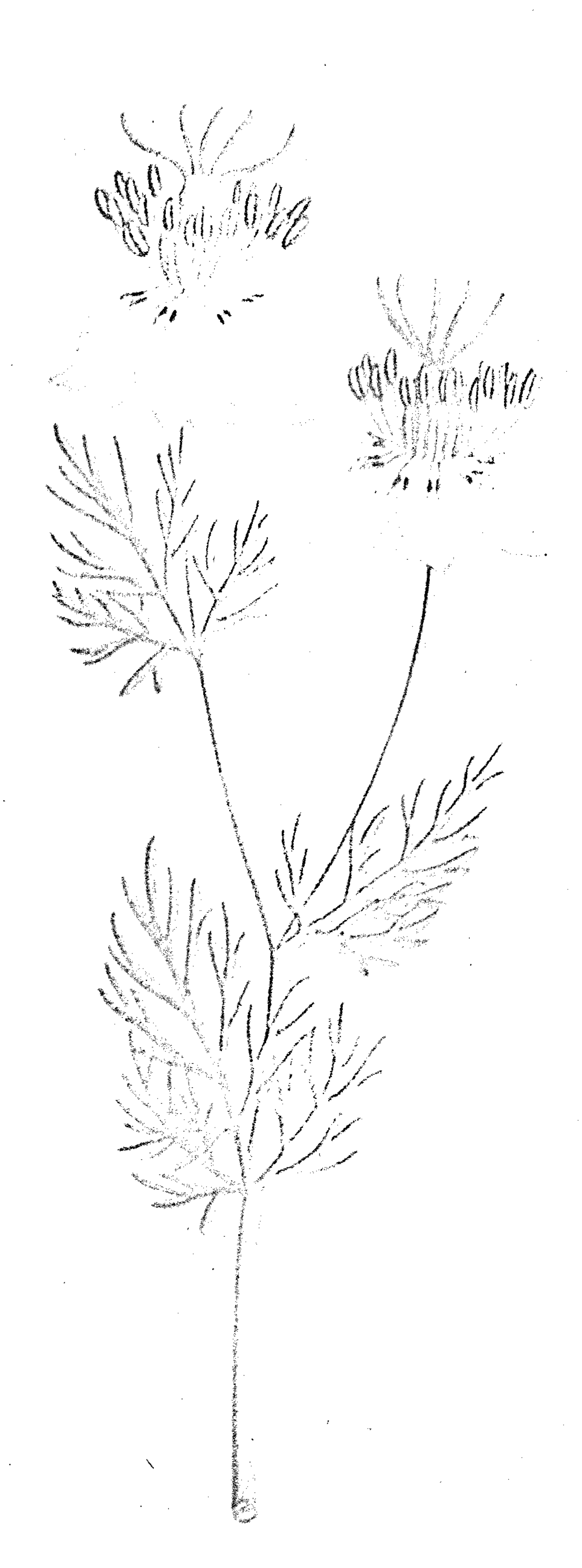
Part Used : Fruits, seeds and the oil obtained from them.

Principle constituents : The fruit contains volatile oil containing nigellone, fixed oil, bitter principle nigellin, saponin glycoside melanthin, tannin and alkaloids nigelline and connigelline.

Uses : Diuretic and carminative. Nigellone is antispasmodic and used in bronchitis , asthma and whooping cough . Melanthin is toxic to fish and warm blooded animals . Seeds are added to food and bread to give them good taste .

References : 1, 3, 12, 20, 21, 32, 33, 38, 40, 54.





(249) NYMPHAEA ALBA LINN.
NYMPHAEACEAE

English Name : White water lily, Flatter doek.

Local Name : بشنين أبيض ، حشيشة السمك

Description : An aquatic perennial plant with round fleshy floating leaves and large white, sweet - smelling flowers 10 - 25 cm in diameter. Flowers open only when the sun is shining.

Fruits are round green and verrucose.

The plant is cultivated as an ornamental.

Part Used : Rhizomes, seeds, flowers and leaves.

Principle constituents : Several alkaloids from which nymphaeine, nupharine are known, cardinolide glucoside nymphalin, tannin and myricitrine.

Uses : The plant is anaphrodisiac, sedative to the nervous system and used in the treatment of spermatorrhea (flow of semen without sexual stimulation).The glucoside nymphalin is cardiotonic. Seeds are known as « pleasure destroyer » or « love killer » and in french « couper L'amour » as they supress sexual excitement .

References : 1, 3, 12, 21, 22, 32, 38, 40.



(250) OCIMUM BASILICUM LINN.
LABIATAE

English Name : Sweet basil, Basil.

Local Name : حبق ، ريحان

Description : A strongly aromatic annual plant 20 - 50 cm high. Leaves are pale green opposite lanceolate to oval. Flowers white or pink 1.5 cm long. The plant is cultivated as an aromatic and condiment plant.

Part Used : Leaves, flowering tops and seeds.

Principle constituents : Leaves contain alkaloids , glucosides , saponins , tannin and volatile oil contains camphor (Basil camphor) , cineol , linalool , eugenol and sesquiterpenes .

Seeds contain large amount of mucilage.

Uses : Aromatic, stomachic, antipyretic, diaphoretic, carminative, antispasmodic, lactagogue and condiment. Leaf juice is slight narcotic and allays irritation in the throat . Externally it is used in eczema , insect bites and as hair tonic .

Flowers are abortifacient , astringent and expectorant . Volatile oil is insect repellant and antirheumatic .

References : 1, 3, 10, 12, 15, 17, 20, 21, 22, 24, 25, 26, 38, 39, 40, 54.



(251) OLEA EUROPAEA LINN.
OLEACEAE

English Name : Common Olive.

Local Name : زيتون

Description : A densely rounded tree about 20 m. high. Leaves evergreen, grey - green or silvery beneath and about 3 - 7 cm long.

Flowers small, fragrant, borne in panicles shorter than the leaves.

The plant is cultivated everywhere in Libya.

Part Used : Fruit, fixed oil obtained from it, barks and leaves.

Principle constituents : It contains fixed oil. The green fruit contains glycosides oleuropein and oleoside. The leaves contain glycosides, tannins, triterpene, saponins, choline and unsaturated lactone elenolide $C_{11}H_{12}O_5$ m. p. 155 - 6 C°.

Uses : The leaves show hypoglycemic activity. The oil is emollient, nutrient hypotensive, diuretic, mild laxative in chronic constipation and used as solvent for pharmaceutical preparations. Leaves are astringent , hypotensive and their extract relaxes smooth muscles by direct action , increases blood circulation and urine secreation . Bark is bitter , astringent . Cake left after the extraction of the oil is nutrient for cattle .

References : 1, 2, 10, 21, 22, 24, 25, 26, 38, 39.



(252) ONONIS SPINOSA LINN.
LEGUMINOSAE

English Name : Springrest - harrow.

Local Name : شديدة

Description : A perennial plant 25 - 40 cm long, sometimes woody. Stem is rigid with sharp spines. Leaves are dark green trifoliate or entire and small in size. Flowers bright pink.

The plant occurs in wheat fields.

Part Used : Flowers and roots.

Principle constituents : The plant contains volatile oil, flavone glycoside onanin, onocerin, ononide and other compounds.

Uses : The plant is used in the treatment of urinary tract inflammations, and in kidney stones.

References : 1, 3, 34, 38, 40.





(253) OPUNTIA FICUS - INDICA MILL.
CACTACEAE

English Name : Indian Fig , Prickly pear .

Local Name : كرموز هندي ، تين هندي ، صبار

Discription : A plant cultivated everywhere in Libya hedges . Jointed stems and branches , the joints thick and fat . True leaves which are very small and fleshy soon drop off . Flower yellow . Fruit pear or egg - shaped yellow with reddish bulb .

Part Used : Fruits and stems.

Principle constituents : Fruits contain the sugars glucose and fructose but no sucrose.They contain ascorbic acid,fixed oil,a bassorin-containing gum resembles tragacanth,calcium oxalates, tannins, colouring matters and a natural yeast known as saccharomyces opuntiae which is responsible for the fermentation of the fruit. Unripe fruit contains an adhesive mucilage.

Uses : Fruits are good nutrients and astringents.They can be used for the production of alcohol and as fodder. When the fruits are eaten to excess , accumulation of seeds may produce bowel obstruction due to impaction .

References : 1, 3, 6, 10, 12, 21, 24.



(254) OPUNTIA VULGARIS MILL.

CACTACEAE

English Name : Opuntia, Barbary fig, Prickly pear.

Local Name : تين شوكي

Description : An ornamental diffuse prostrate plant 30 cm or less high. Joints usually resting on the ground and rooting from the lower margin.

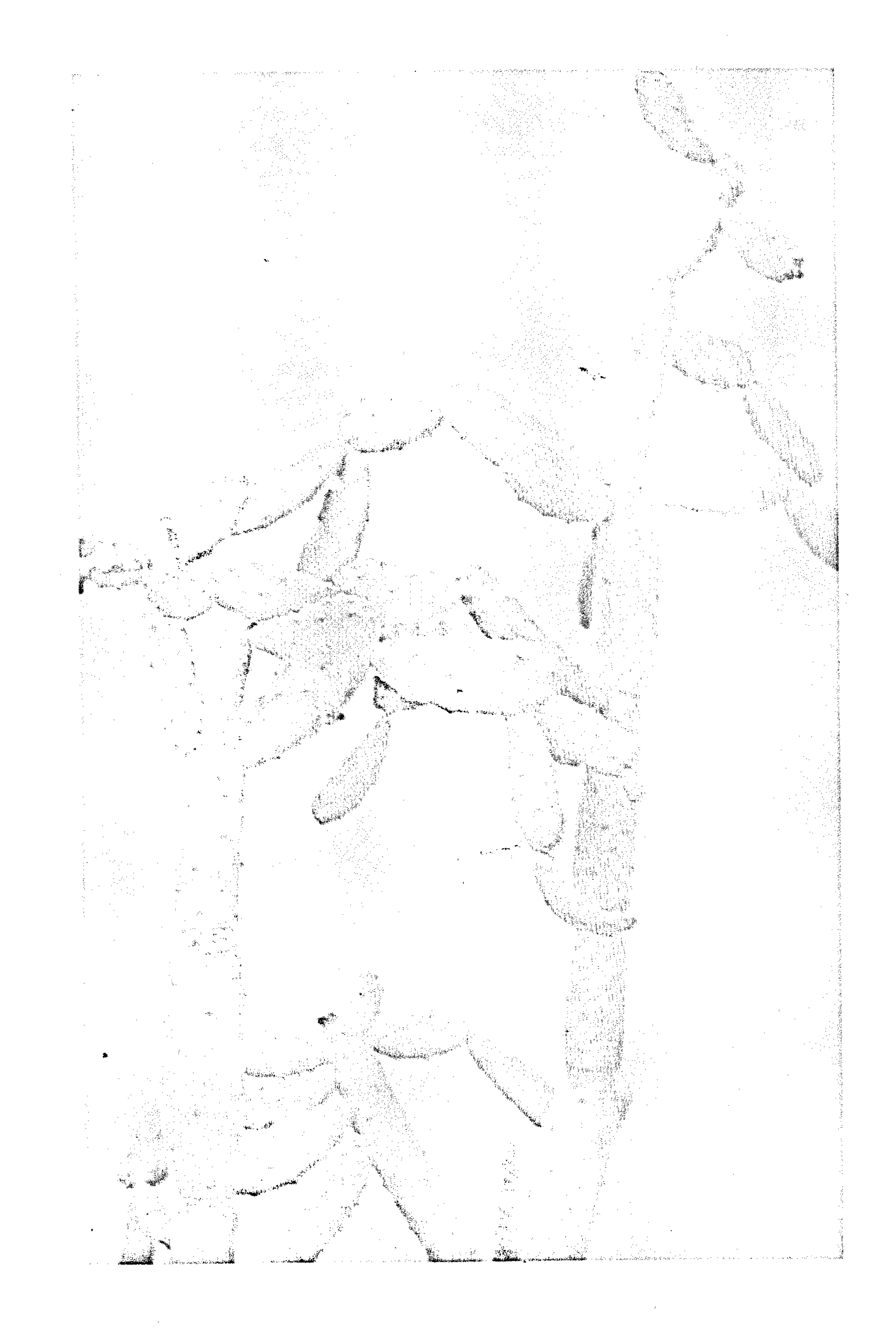
Obovate to suborbicular , thick , pale green , areoles with greyish wool bristles. Spines rarely present. Flower chrome - yellow. Fruit obovate to spherical.

Part Used : Stems and their juice.

Principle constituents : Flowers contain an alkaloid of undetermined structure. Flowers and stems contain a flavonoside m. p. 182 - 4 C° which is toxic . Stems contain calcium and magnesium pectates .

Uses : The stem juice is apllied externally to warts and ulcers and it has been found that it easily removes the corns . It is also applied externally to relieve gout and rheumatism . Internally the juice is anthelmintic and purgative . Chopped leaves (stems) when steeped in water the resulting mixture floats on the surface and is as effective as oil in mosquito control . The pectates when added to penicillin gives a delaying effect . Fruits are not edible

References : 1, 3, 6, 10, 12, 21, 34.



(255) ORCHIS MILITARIS POIRET.
ORCHIDACEAE

Local Name : سحلب

Description : A small shrub with an erect herbaceous leafy stem 30 - 60 cm high. Leaves broadly oval to oblong. Flower purple, many, in a dense oblong spike on a very short pedicle. Tubers are entire.

Part Used : Tubers and fruits.

Principle constituents : Glycosides, alkaloids, starch and mucilage.

Uses : The plant is considered aphrodisiac and emollient. It is given with milk as a nutritive drink. As decoction it is used in case of influenza.

References : 1, 3, 19, 25, 35, 46, 53.



(256) ORIGANUM VULGARE LINN.
LABIATAE

English Name : Wild majoram, Organy.

Local Name : سعتر ، صعتر

Description : An aromatic perennial herb with erect stem up to 60 cm high. Leaves oval with lightly dentate margins. Flowers purplish- pink, very numerous arranged in rows in an inflorescen-ce.

The plant is cultivated .

Part Used : The flowering plant without the roots.

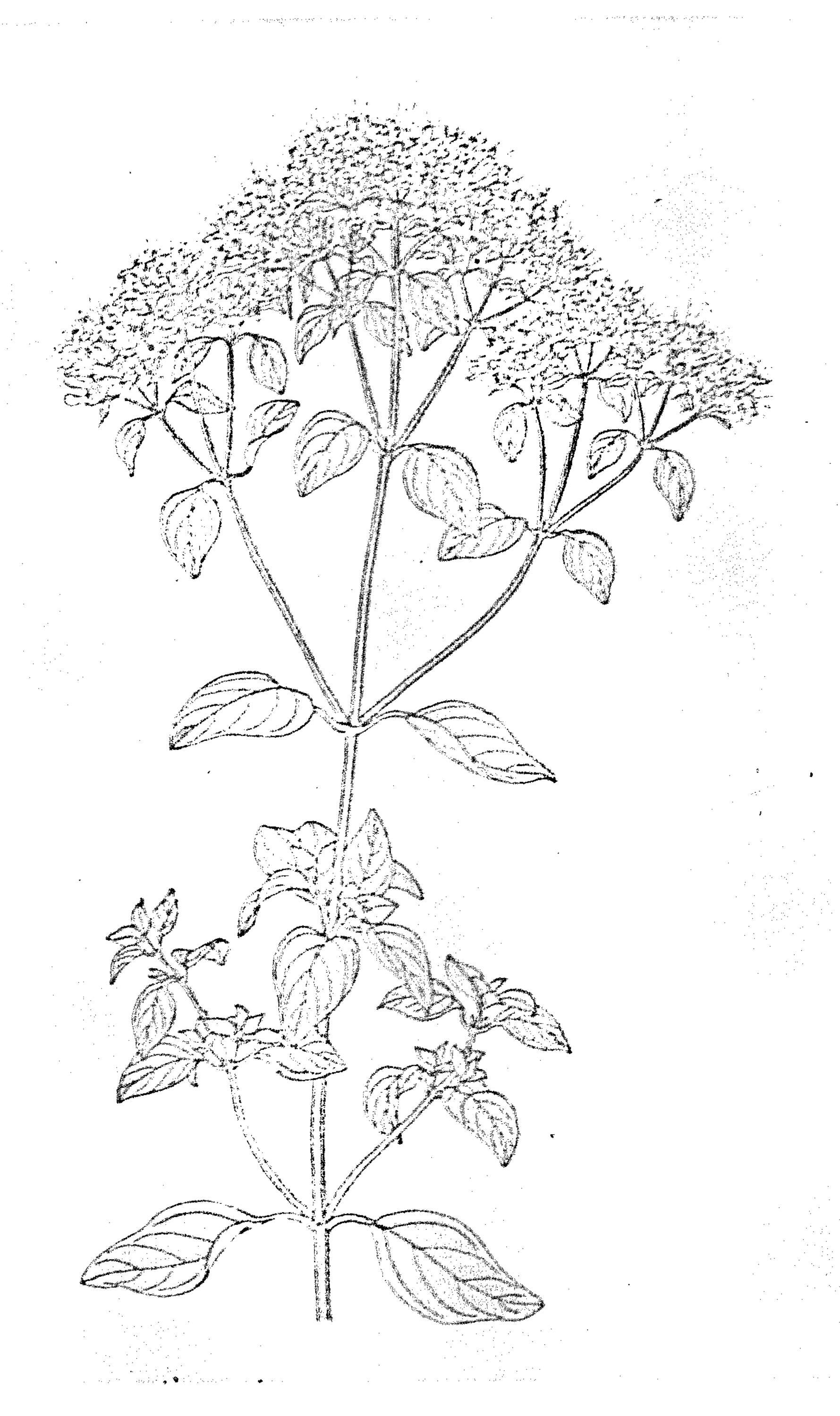
Principle constituents : It contains volatile oil containing thymol and carvacrol. The plant contains origanene and tannin.

Uses : It is tonic, antispasmodic, stomachic, aromatic, carminative, diaphoretic andexpectorant.It is used as condiment Worm infusion of herb is used to promote menstrual flow when suppresed by cold.

Volatile oil is used in rheumatism, toothache and earache.

References : 1, 2, 3, 12, 18, 21, 24, 25, 38,39, 40.





(257) ORYZA SATIVA LINN.
GRAMINEAE

English Name : Rice.

Local Name : أرز، رز

Description : After wheat this is the most important grain in the world. It is cultivated as cereal plant. Leaves 60 cm long, 2 cm wide. The plant bears fruiting panicles 30 cm long. Grains are straw- coloured, becomes white when polished.

Part Used : The grains.

Principle constituents : Grains contain the alkaloid oridine. The husk contains the base oryzyanine. The bran contains the glucoside nukain . Of course the grain is very rich in starch known as rice starch .

Uses : Rice is nutrient. Rice water is demulcent, cooling, soothing, nourishing and good for intestinal inflammation, diarrhea and dysentery. Rice poultice is used like linseed meal poultice.

References : 1, 3, 21, 41.



(258) OXALIS ACETOSELLA LINN.
OXALIDACEAE

English Name : Wood - sorrel.

Local Name : حميض ، حماض ، بقلة حامضة

Description : A creeping perennial plant. Leaves pale green, trifoliate. Flowers white pink - veined 1.5 cm in diameter, borne on a flower - stem upto 10 cm high .

The herb is a roadside weed common in Tripoli and Benghazi areas .

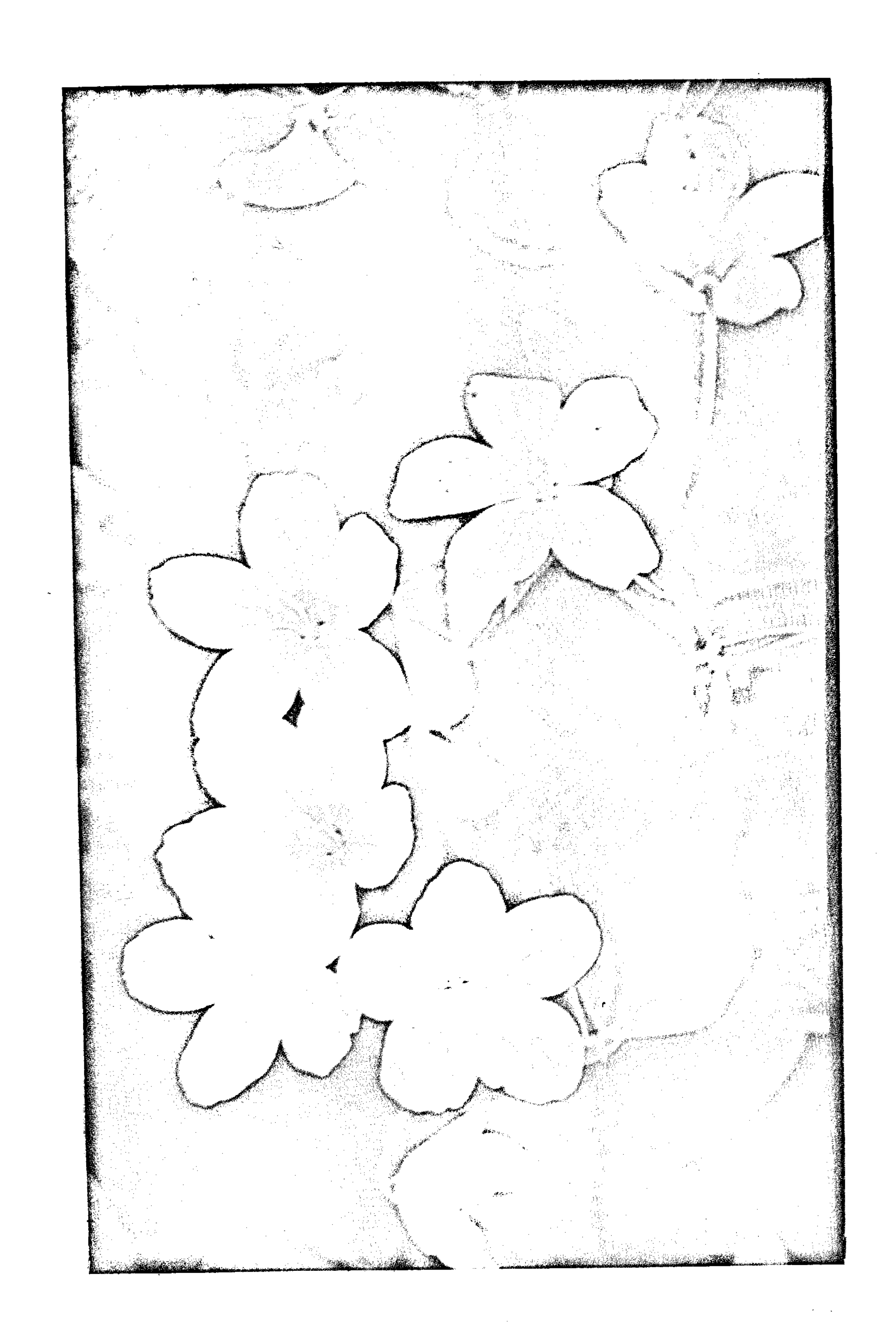
Part Used : Leaves and seeds.

Principle constituents : Oxalic acid , potassium oxalates and oxalic acid oxidising enzyme .

Uses : Seeds are astringent , styptic , emmenagogue , diuretic , expectorant and anthelmintic . Seeds are used in the case of ejection of semen without sexual desire (like Nympheae alba) .

Externally , they are used as cataplasma for sores . Leaves are toxic when ingested in large doses . They have been applied in the past as antidote for both murcury and arsenic poisoning . It causes kidney failure , therefore it is used only externally .

References : 1, 3, 10, 12, 19, 21, 22, 40, 44, 50, 57.



(259) PANCRATIUM MARITIMUM LINN
AMARYLLIDACEAE

English Name : Sea pancratium lily, Sea daffodil.

Local Name : بصيل ، نوار الكلب ، عنصل ، سوسن
زنبق ، قعبول

Description : A perennial bulbous plant about 30 - 50 cm high. Flowers white, very fragrant 5- 10 in each umbel having a large cup almost like that of a daffodil 5- 8 cm long. Leaves linear and evergreen. Roots are tubers. The plant is common along the seashore.

Part Used : Bulbs.

Principle constituents : Bulbs contain flavonoid compounds, rutin and about ten alkaloids the most important of which are lycorine, lazettine, ambelline, crinidine, crinine, pomelline, crinamine and crimelline.

Uses : The fresh bulb is sliced and boiled in sugar solution or honey for few minutes then strained. The strained solution is taken everyday in the morning as a treatment for asthma.

References : 1, 2, 3, 34.



(260) PAPAVER RHOEAS LINN.
PAPAVERACEAE

Local Name : Field poppy, Red poppy, Corn rose, Corn poppy.

Local Name : بوقرعون ، متور ، شقائق النعمان زغليل

Description : A well known annual plant 30 - 40 cm high stem is hairy containing white latex Leaves pinnate. Flowers scarlet 5-8 cm in diameter. The capsule is small longtudinally elongated.

The plant grows wildly in the cultivated areas all over the Jamahiriya.

Part Used : Petals.

Principle constituents: The latex contains the alkaloids allocryptopine, berberine, coptisine, cryptopine, glaucamine, glaudine, isorhoeadine, isorhoeagenine, oxysanguinarin, papaverubines A, B, C, D, and E, protopine, rhoeadine, rhoeagenine, sanguinarine, sinactine, stylopine and thebaine and isorhoeagenine-glycoside. Flowers contain mucilage, anthocyanins such as mekocyanin and traces of alkaloids mainly rhoeadine.

Uses : Petals are expectorant, diaphoretic, digestive, emollient and sedative. It has no morhpine like activity. The red colour of the petals is used in colouring syrups and the petals themselves are used in salads . Latex from the capsules is narcotic and slightly sedative .

References : 1, 3, 11, 12, 14, 19, 21, 25, 27, 28, 32, 33, 38, 4



(261) PAPAVER SOMNIFERUM LINN.
PAPAVERACEAE

English Name : Poppy, Opium poppy, White poppy.

Local Name : خشخاش ، أبـو النـوم ، أفيو ن

Description : An annual plant upto 120 cm high. Stem rigid having a glaucous green colour. Leaves are coarsely dentate, undulate and glossy. Flowers are very large, lilac with a purplish - red blotch at the base of the petals. The capsule is large globular with very small white seeds.

The plant is very rare but sometimes it grows as a weed in waste areas in Tripoli.

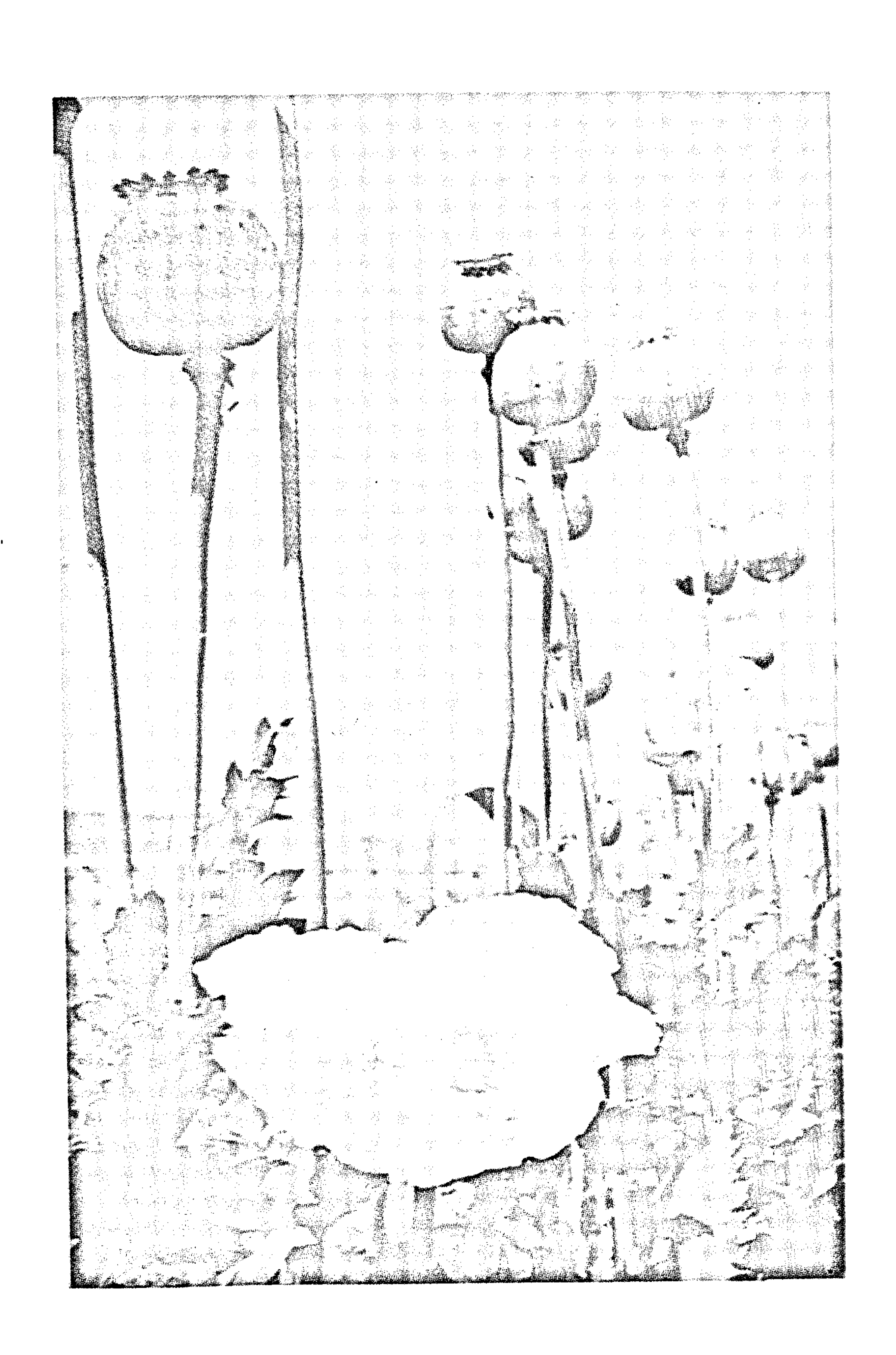
Part Used : Opium which is the dried milky latex obtained by incisions made in the unripe fully grown capsules of the plant .

Principle constituents : Opium contains about 42 alkaloids the most important are morphine, codeine, thebaine, papaverine, narceine and narcotine. It contains acetic, lactic and meconic acids, a gummy pectious substance, albumin, wax, fat, resin, meconin and meconoisin.

Uses : Opium alkaloids are generally narcotic, hypnotic and analgesic . Morphine is the most powerful alkaloid . It is narcotic and diaphoretic . Codeine is mild sedative and used in allaying cough . Opium causes severe constipation and produces addiction .

The plant is cultivated for the production of opium alkaloids but under the control of governments. Seed oil is used in paints.

References : 1, 3, 11, 12, 14, 17, 20, 21, 22, 25, 26, 27, 28, 38, 40, 50, 57.



(262) PARIETARIA OFFICINALIS LINN.

URTICACEAE

English Name : Parietary, Day and night, Pellitory.

Local Name : حريق ، حريقه

Description : An annual or perennial tender herb without stinging hairs. Leaves alternate. Roots grow in crevices of walls or rocks. Flowers pinkish - brown. The plant grows at bases of date palms.

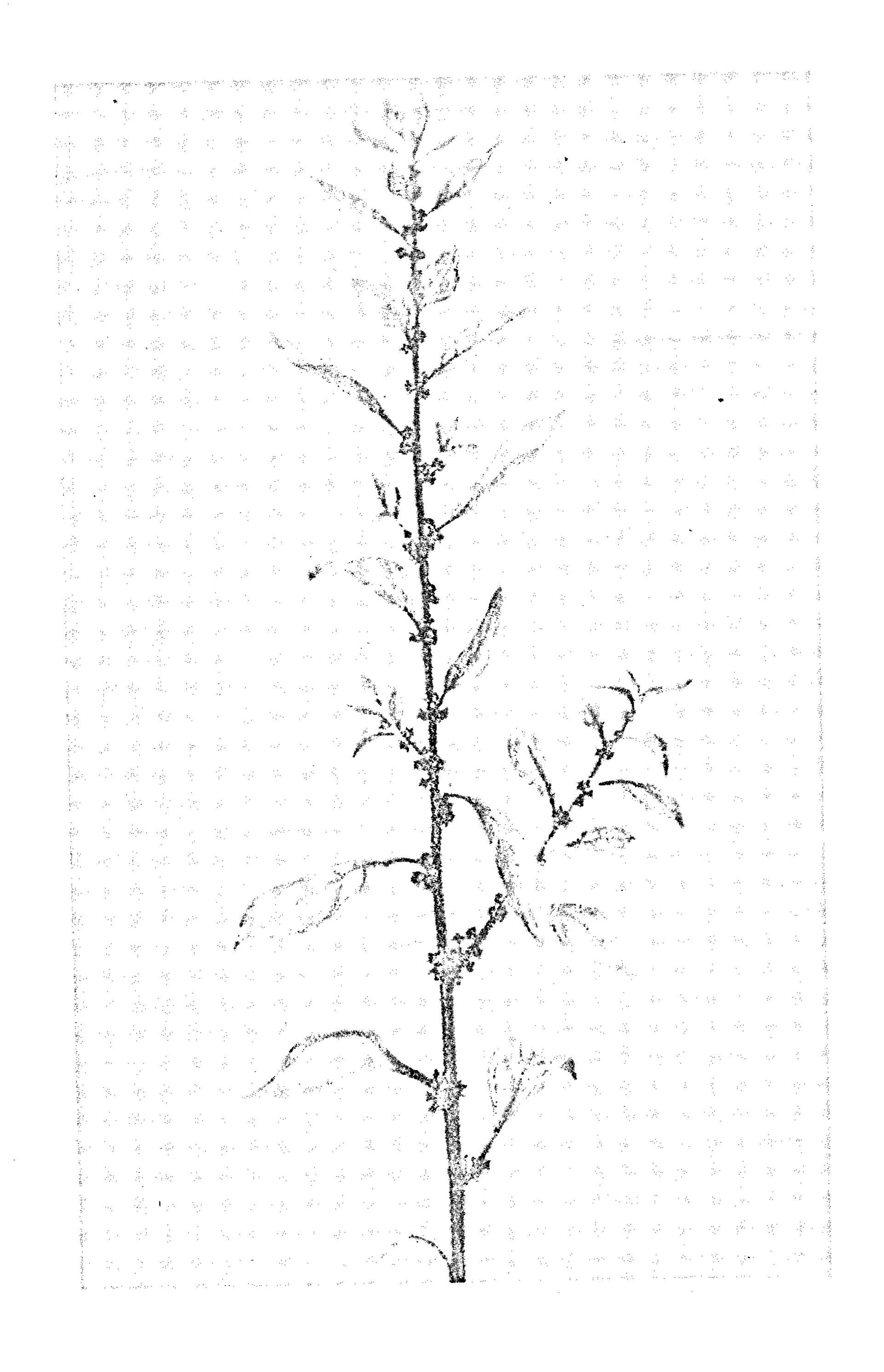
Part Used : The whole fresh plant without the roots.

Principle constituents: Flavonoid pigments and potassium nitrates .

Uses : The plant is diuretic and emollient. It is used in the urinary infections , ascites and in bronchitis . Externally it is used to treat wounds , anal fissures , furuncles and mixed with olive oil is also used in skin irritation.

References : 1, 3, 22, 38, 44, 50 57.





(263) PASTINACA SATIVA LINN.
UMBELLIFERAE

English Name : Parsnip, Cow cakes.

Local Name : سفنـاري أبيض ، جزر أبيض

Description : A wild or cultivated biennial plant with strong unpleasant odour. A stout hairy growing from 60 - 120 cm high. Stem grooved and hollow. Leaves alternate, pinnately compound with lobed leaflets. Flowers yellow small borne on large flat umbel.

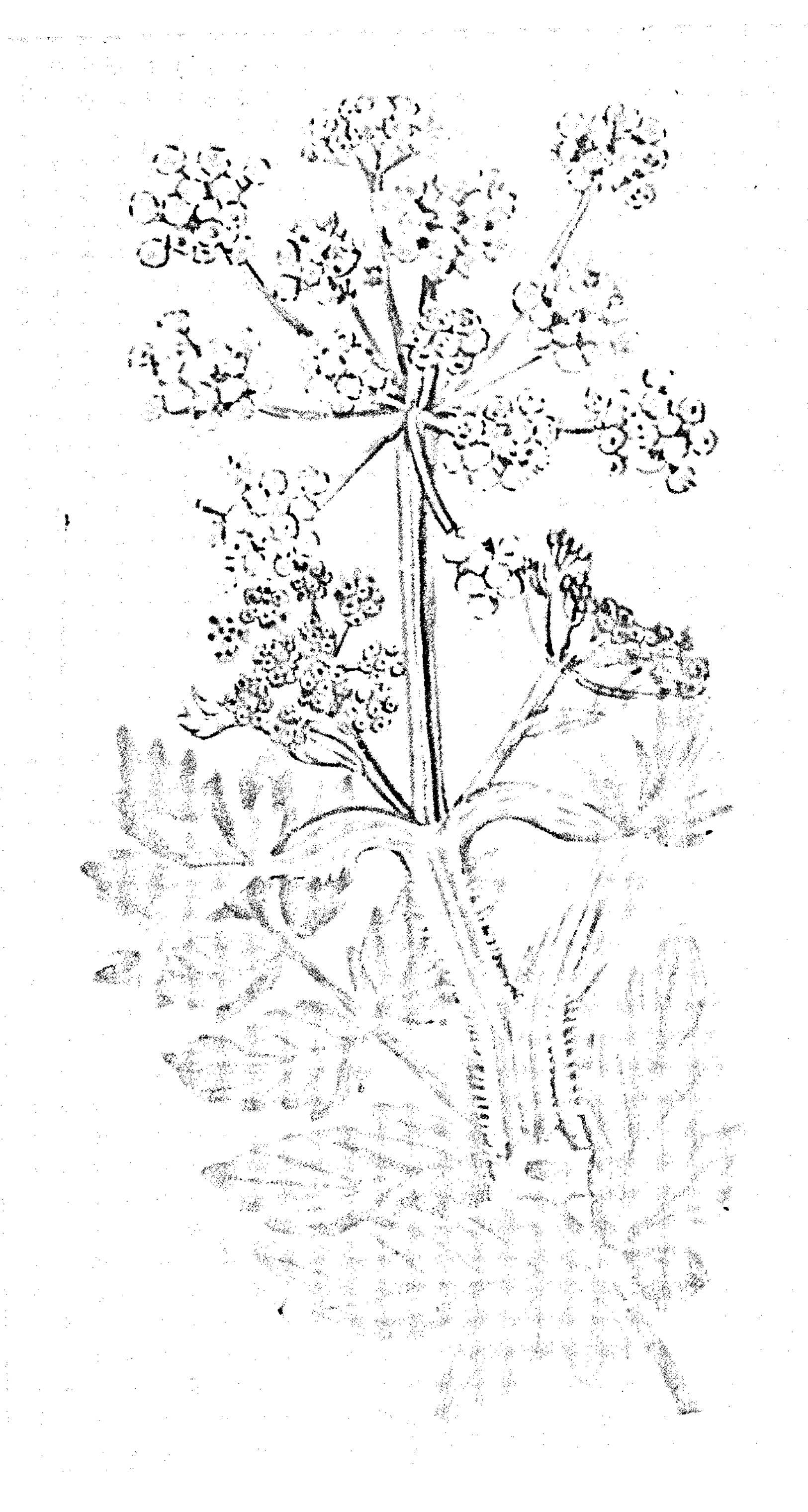
Part Used : The grains and roots.

Principle constituents : The grains contain volatile oil, fatty acids and an alkaloid known as pastinacine. Roots contain fixed oil , proteins , starch and pectin . The whole plant contains the furo - coumarins xanthotoxin , bergaptene and imperatorin , fixed oil and resinous material .

Uses : The plant is used as vegetable. It is diuretic, not used medicinally. It produces photodermatitis.

References : 1, 3, 10, 19, 22, 33, 40.





(264) PEGANUM HARMALA LINN.

ZYGOPHYLLACEAE

English Name : Wild rue, Syrian rue, Peganum, Harmel

Local Name : حرمل ، حرمله ، سذب بري

Description : A perennial herb 50 - 100 cm high. Glabrous, glaucous, stem herbaceous, branching from the base. Leaves irregularly disected, leaflets narrow, linear. Flowers are large star - like in shape and white in colour.

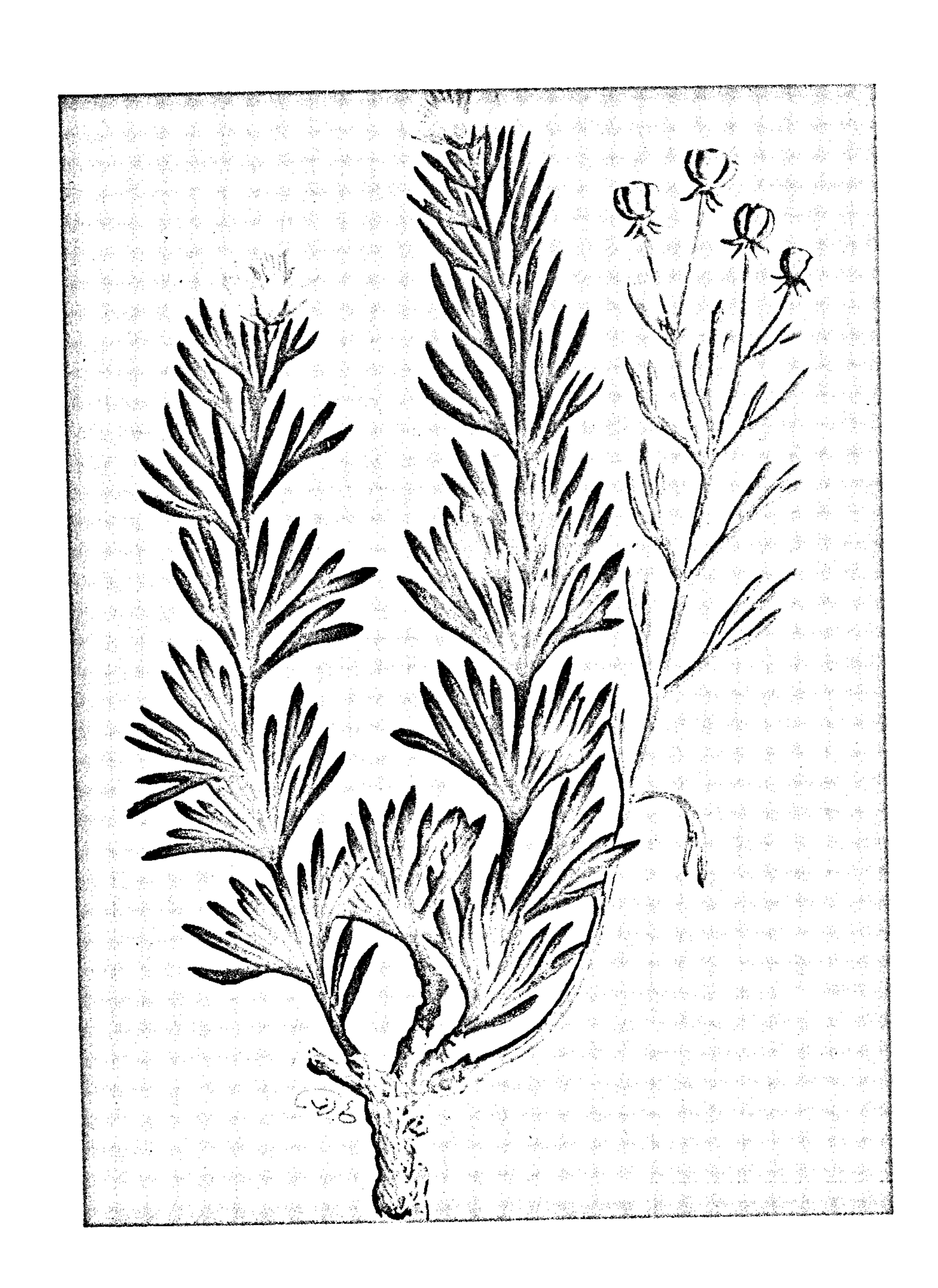
The plant grows in Tripoli, Garian, Zanzur, Beni Ulid, Tarhuna, Benghazi and many places all over the Jamhiriya.

Part Used : The whole plant.

Principle constituents : Seeds contain 2.5 - 4 % of alkaloids mainly harmaline $C_{13}H_{14}N_2O$, harmine , $C_{13}H_{14}N_2O$ harmalol $C_{12}H_{12}N_2O$, vasicine known as peganine and pegarine .

Uses : The plant is anthelmintic used for tape - worms, narcotic, antibacterial and protozoacidal. Small doses of harmaline causes euphoria and large doses cause hallucinations. Leaves and stems strengthen the uterus, ease delivery and restore sexual potency. Seeds are used in India for the treatment of chronic malaria. Roots are applied to kill lice. toxicity appears as convulsions, tremor, depression of central nervous system, weakness of the heart and low blood pressure. Harmalol causes sudden paralysis.

References : 1,2,3,7,11,12,13,14,21,22,25,32,33,54.



(265) PETROSELINUM SATIVUM HOFFM.
UMBELLIFERAE

English Name : Parsley, Garden parsley.

Local Name : معدنوس ، مقدونس ، بقدونس

Description : A biennial cultivated plant pinnate compressed leaves. Inflorescence umbel with nearly equal rays.

Fruits ribbed.

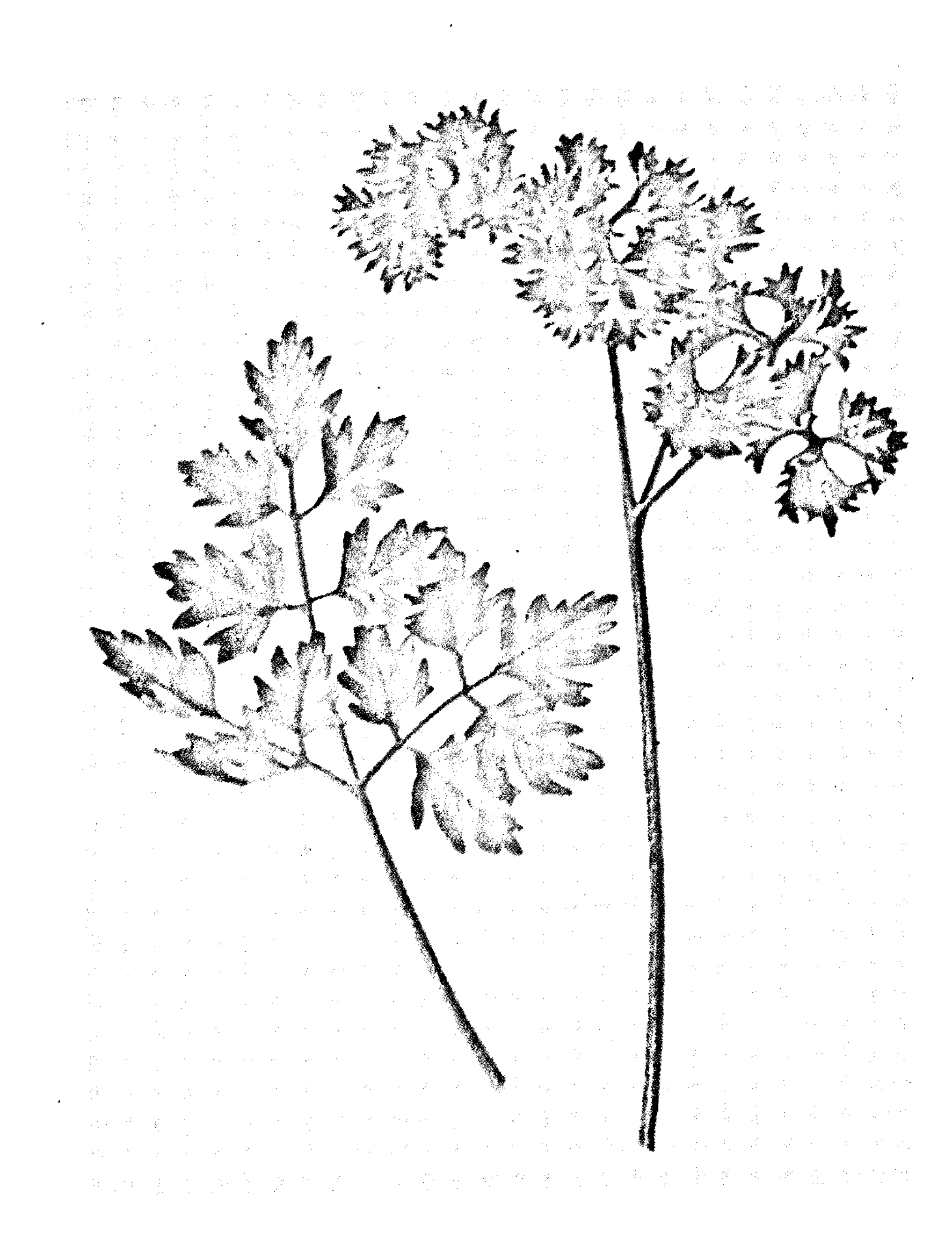
Part Used : Fruits, herbs and roots.

Principle constituents : The plant contains mucilage, vitamins A and C , glycoside apiin , myristicin and bergaphen . It contains also unknown alkaloid and volatile oil containing apiole . Fruits contain coumarin..

Uses : The fruits are used as emmenagogue, diuretic, condiment, carminative and stomachic. It is used as aphrodisiac due to the presence of apiole which is used also in dysmenorrhea and uterine disorders. Externally the bruised leaves are used as facial cream to improve the appearance of the skin.

References : 1, 3, 10, 14, 18, 21, 24, 25, 26, 33, 38, 54.





(266) PHAGNALON RUPESTRE LINN.

COMPOSITAE

English Name : African fleabane.

Local Name : عشبه الأرنب ، طعام الأرنب

Description : Herb about 40 - 60 cm high woody at the base. Leaves somewhat toothed often wavy. Flower heads yellow and solitary.

The plant occurs in Tripoli, Benghazi, Derna, Tarhuna and Tobruk.

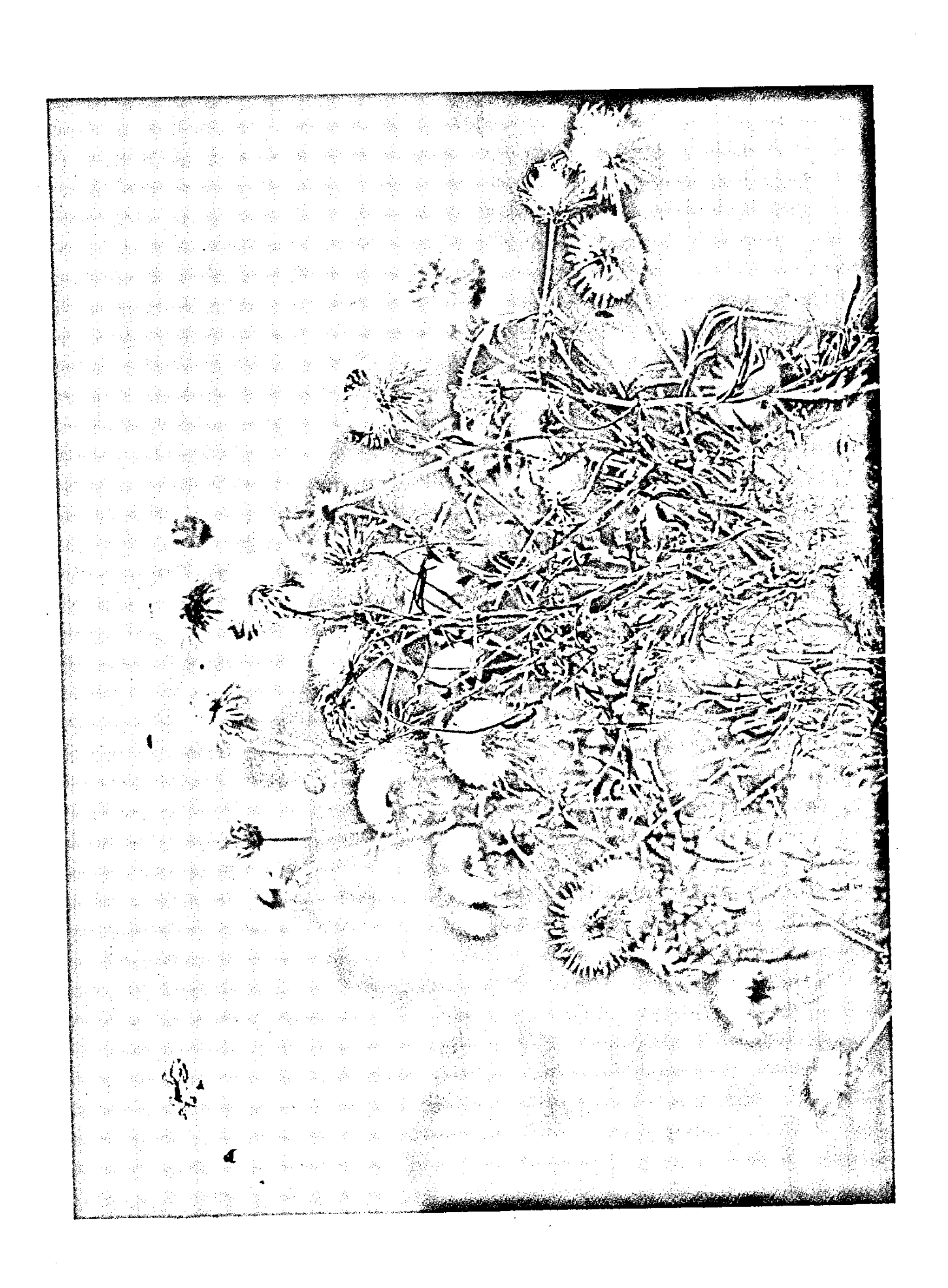
Part Used : The whole herb.

Principle constituents : Not investigated.

Uses : Plant decoction is very effective in cases of urinary calculi. It reduces the renal colic pain. It is claimed that using the plant eases the passage of calculi if it is of small size.

References : 1, 2, 3.





(267) PHASEOLUS VULGARIS LINN.
LEGUMINOSAE

English Name : Kidney beans, Dwarf.

Local Name : فاصوليا

Description : A twining cultivated annual plant cultivated as vegetable for the production of the fruits and seeds . Flowers white to violet purple . Fruit is a pod , slender , straight or slightly curved . Seeds are the edible , kidney - shaped beans .

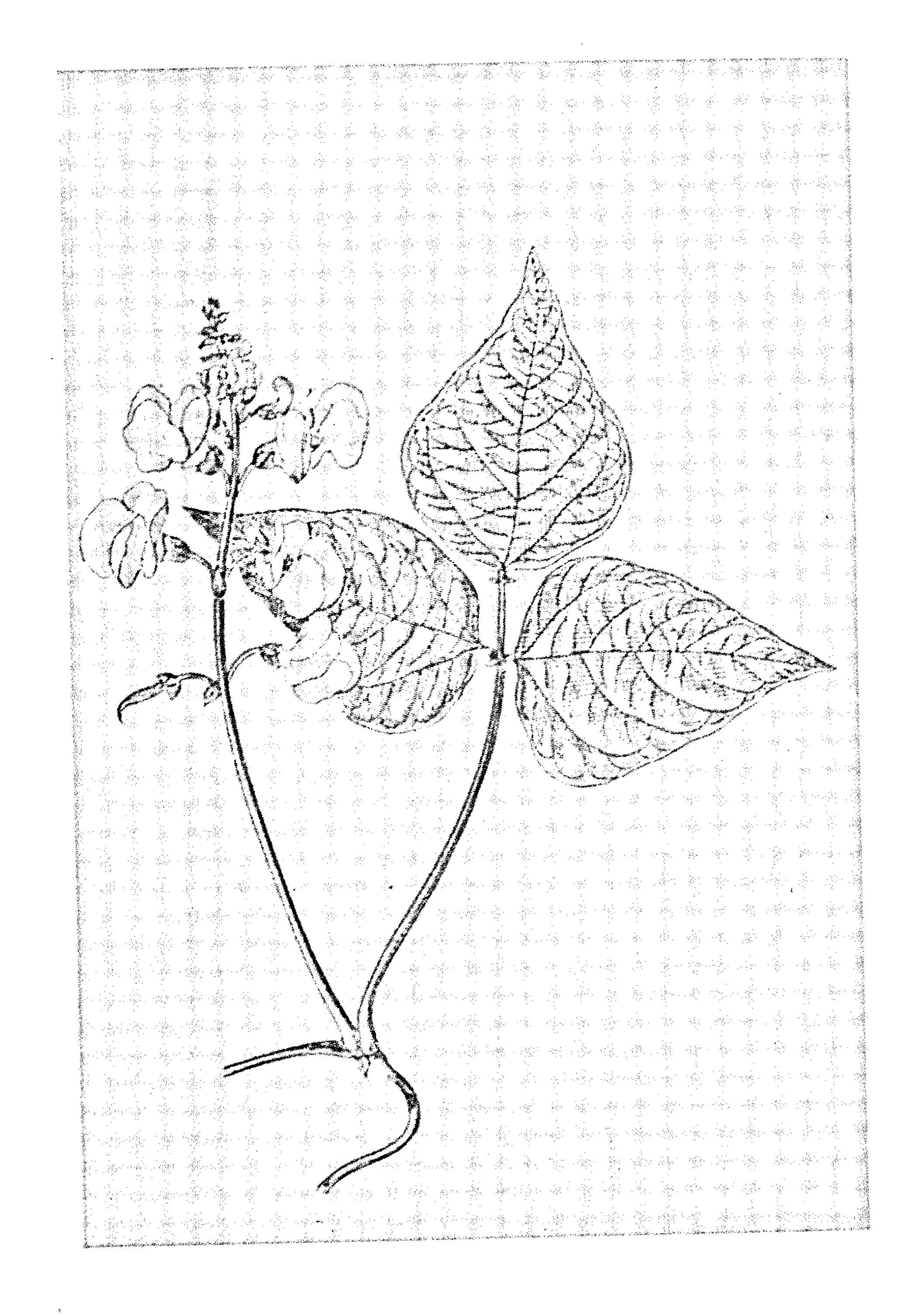
Part Used : The beans and dried pods.

Principle constituents : The plant contains lectins and phytohaemagglutinin which stimulates both mitogenesis and cell - mediated cytotoxicity. It contains the antibiotic phaseolin which is active against fungi. Beans contain the albumen phasine which is not destroyed by drying or prolonged cooking, betaine, trigonelline, tyrosine argenine and calcium. Fruits contain rubidium. Leaves contain allantion .

Uses : Tincture of the green pods is used in rheumatism, siatica and renal infections.

Eating the dried beans (without cooking) produces vomiting, diarrhea and internal haemorrhage. The dried pods without the beans are diuretic and used in case of diabetes .

References : 1, 3, 21, 22, 24, 38, 40.



(268) PHOENIX DACTYLIFERA LINN.

PALMAE

English Name : Palm tree.

Local Name : نخيل

Description : A well known cultivated tree with an unbranched trunk, covered with fibrous arching or curving down leaves. Leaflets stiff. Fruit 3 - 5 cm long yellow to red or brown, borne on fruiting branches.

Part Used : Fruits known as dates.

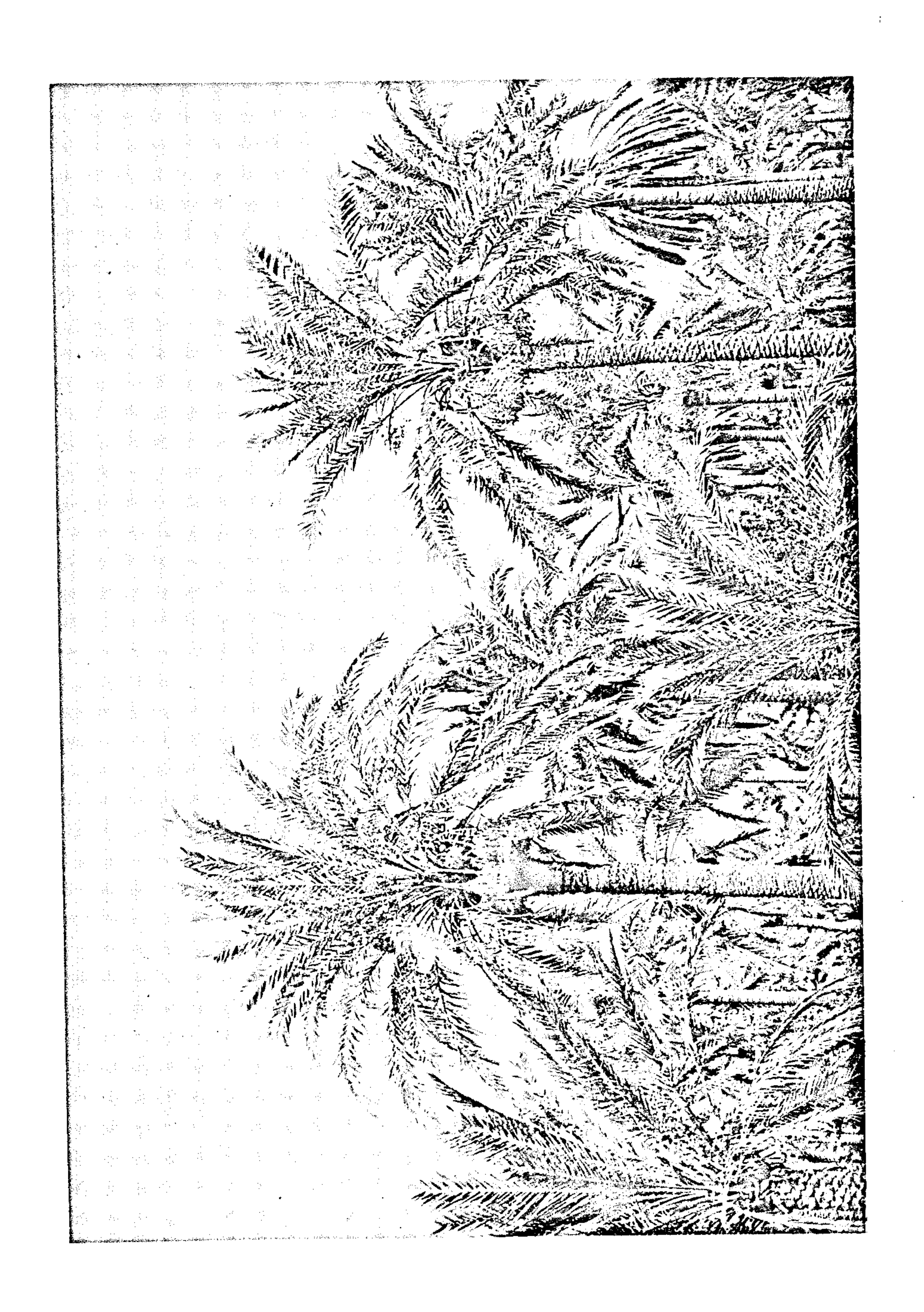
Principle constituents : The fruit is rich in sugars. It contains vitamins B 1, B 2, C and niacin, and the minerals calcium and iron.

Uses : Fruits are demulcent, nutrient and diuretic. Fresh juice is cooling and laxative . Gum is useful in diarrhea and diseases of the genitourinary system .

Powdered inner wood is applied to wounds as antibiotic.

References : 1, 3, 12, 14, 21.





(269) PIMPINELLA ANISUM LINN.

UMBELLIFERAE

English Name : Anise, Aniseed.

Local Name : كمون رقيق ، ينسون

Description : A hairy annual herb with an erect stem up to 60 cm high. Basal leaves with long petioles, cordate, divided, dentate margin, upper leaves pinnate. Flowers yellowish, in a loose umbel. Fruits 2 firmly attached mericarps.

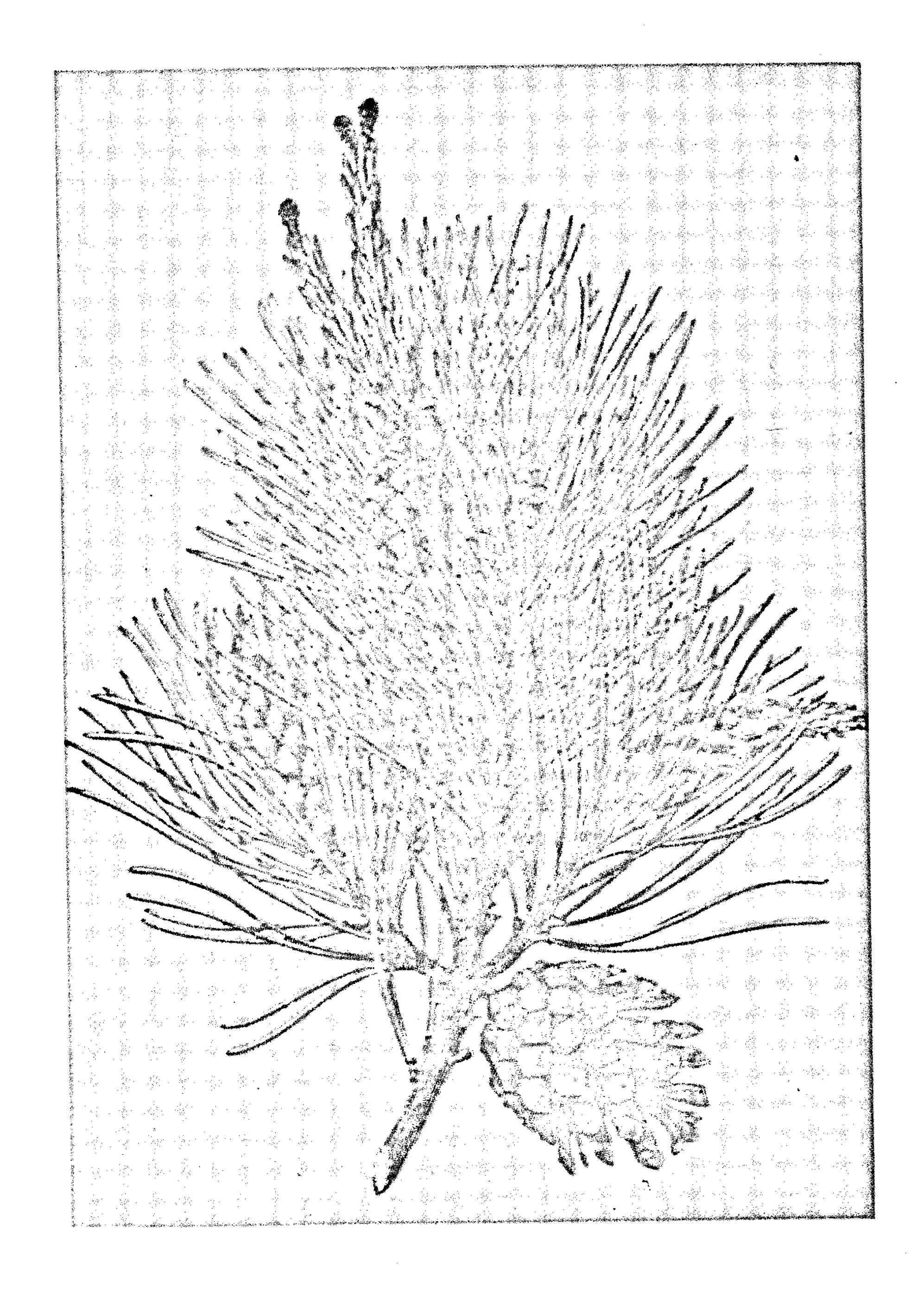
The plant is cultivated as an aromatic and condiment.

Part Used : Fruits and volatile oil obtained from them.

Principle constituents : Volatile oil containing anethole, methyl chavicol and anisketone, choline, anisaldehyde, anisic acid and dianethole. The fruit contains also the flavonoids luteolin, luteolin - 7 - 0 - glucoside and luteolin - 7 - 0 xyloside , fixed oil and protein .

Uses : The fruit or the oil are used as aromatic, carminative, diuretic, stomachic,expectorant,flavouring agent in tooth - pastes and mouth washs. The fruit is used as condiment. Anethole stimulates most of the body glands. The fruit is lactagogue due to the presence of estrogenic compounds. It is used in liquor manufacture and in the treatment of asthma.

References : 1, 3, 11, 12, 18, 20, 21, 22, 25, 26, 37, 38, 40, 43, 54.



(270) PINUS MARITIMA LAM.
PINACEAE

English Name : Sea pine, Cluster pine, Swamp pine.

Local Name : لب ، شيله

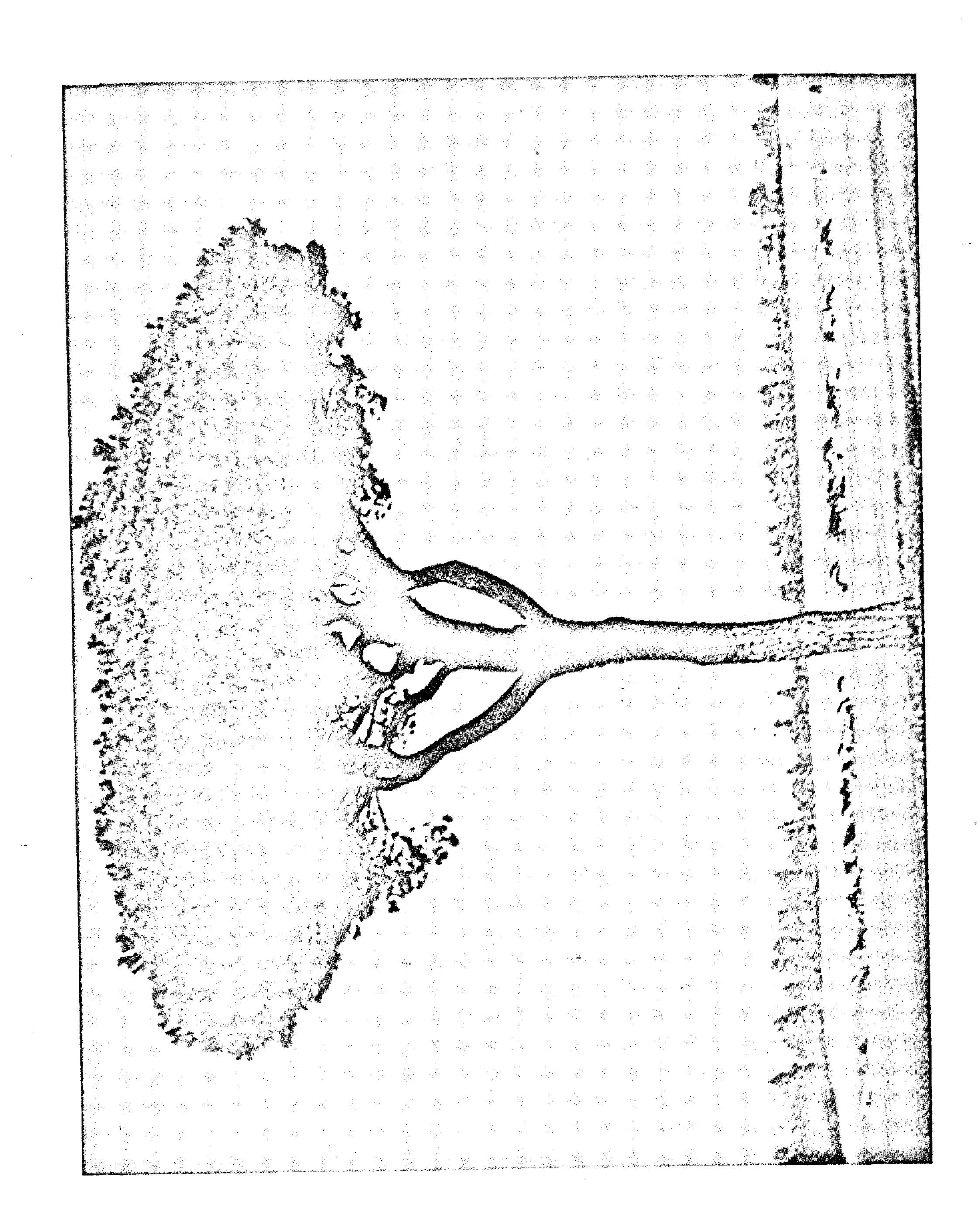
Description : An evergreen resin - yielding tree. Leaves in pairs 12- 15 cm long, rigid, curved, having hard apex and horny point. Bark thick, dark reddish - brown, deeply fissured. Cones, sub - terminal and light brown. Trees occur in Forests in Benghazi area .

Part Used : Leaves, buds and oleo - resin obtained from the trunk.

Principle constituents : As pinus sylvestris it contains oleo - resin which gives upon distillation turpentine volatile oil and rosin (colophony) left after distillation . The oil contains alpha and beta pinene . The plant contains the glycosides pinerin , picein and coniferin .

Uses: Turpentine oil is used externally as local and counter irritant and mild antiseptic. It is used to treat rheumatism and siatica. Buds are diuretic and used to cure infections of the respiratory tract.

References : 1, 3, 12, 26, 38, 50.



(271) PINUS SYLVESTRIS LINN.
PINACEAE

English Name : Yellow - pine, Norway - pine, Scotch- pine.

Local Name : صنوبر

Description : A well known evergreen tree with a spreading crown and reddish bark. Leaves dark green needles 5 - 7 cm long. Male flowers yellow cones short and woody.

The plant was introduced into Benghazi.

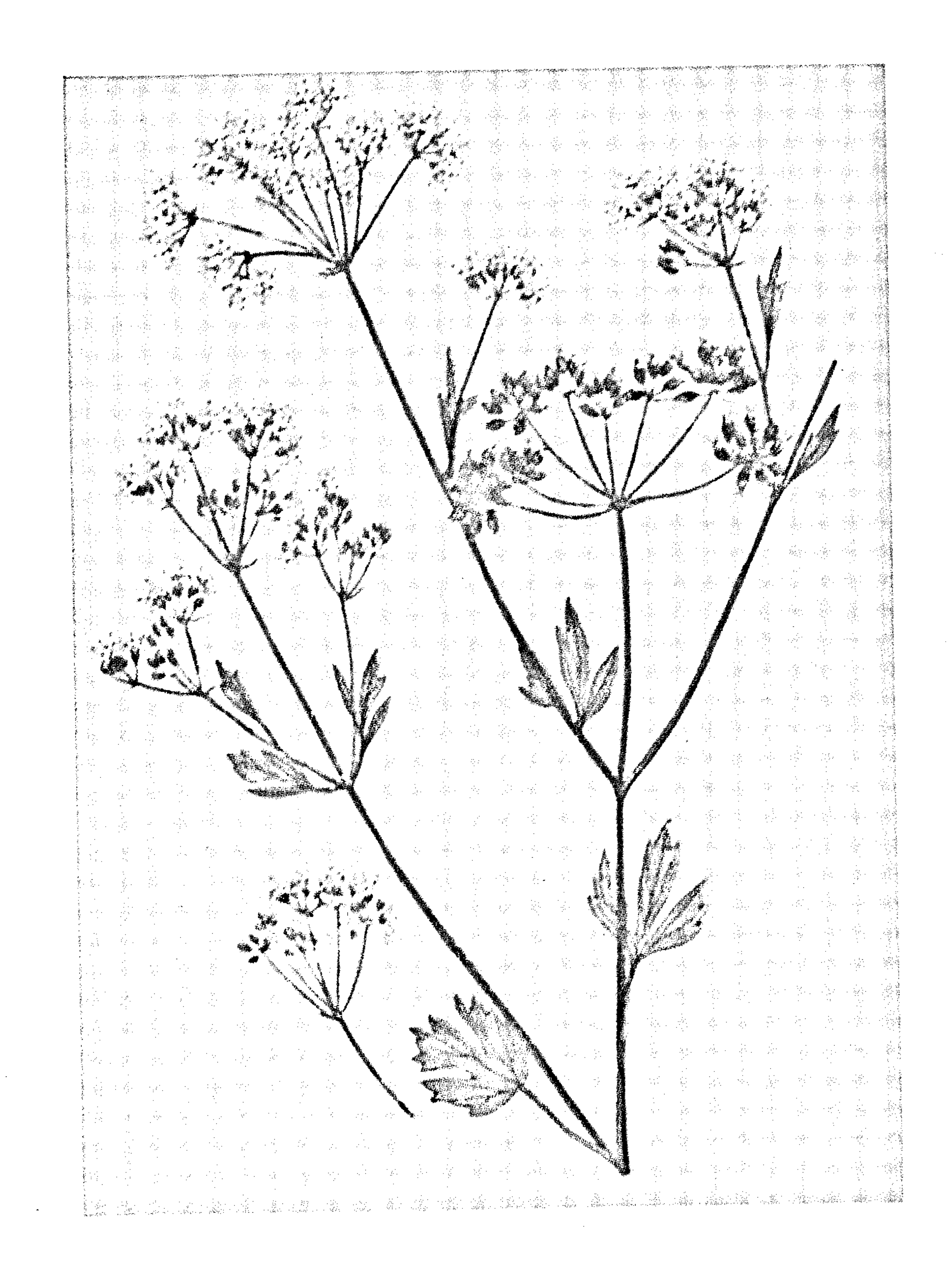
Part Used : Leaves, buds and oleo - resin obtained from the trunk.

Principle constituents : The oleo - resin after distillation gives turpentine volatile oil which contains alpha and beta - pinene and bornyl acetate and gives balsamic resin known as rosin or colophony . The plant contains the glycosides pincrin , picein and coniferin .

Uses : Turpentine oil is used externally as local irritant, counter ittitant and mild antiseptic . It is used in cases of rheumatism and siatica.

The buds are diuretic and balsamic and used for infections of the respiratory tract.

References : 1, 3, 12, 25, 26, 38, 40, 43.



(272) PISTACIA LENTISCUS LINN.
ANACARDIACEAE

English Name : Mastiche tree, Mastic tree.

Local Name : بطوم ، جدوم ، فستق شرقي ، شيلي

Description : An evergreen tree about 4 - 5 m high, with a very big crown. Leaves persistant. Flowers dioecious. The wood is reddish.

The tree is common in Jebel Al Akhdar , Benghazi and Tukra .

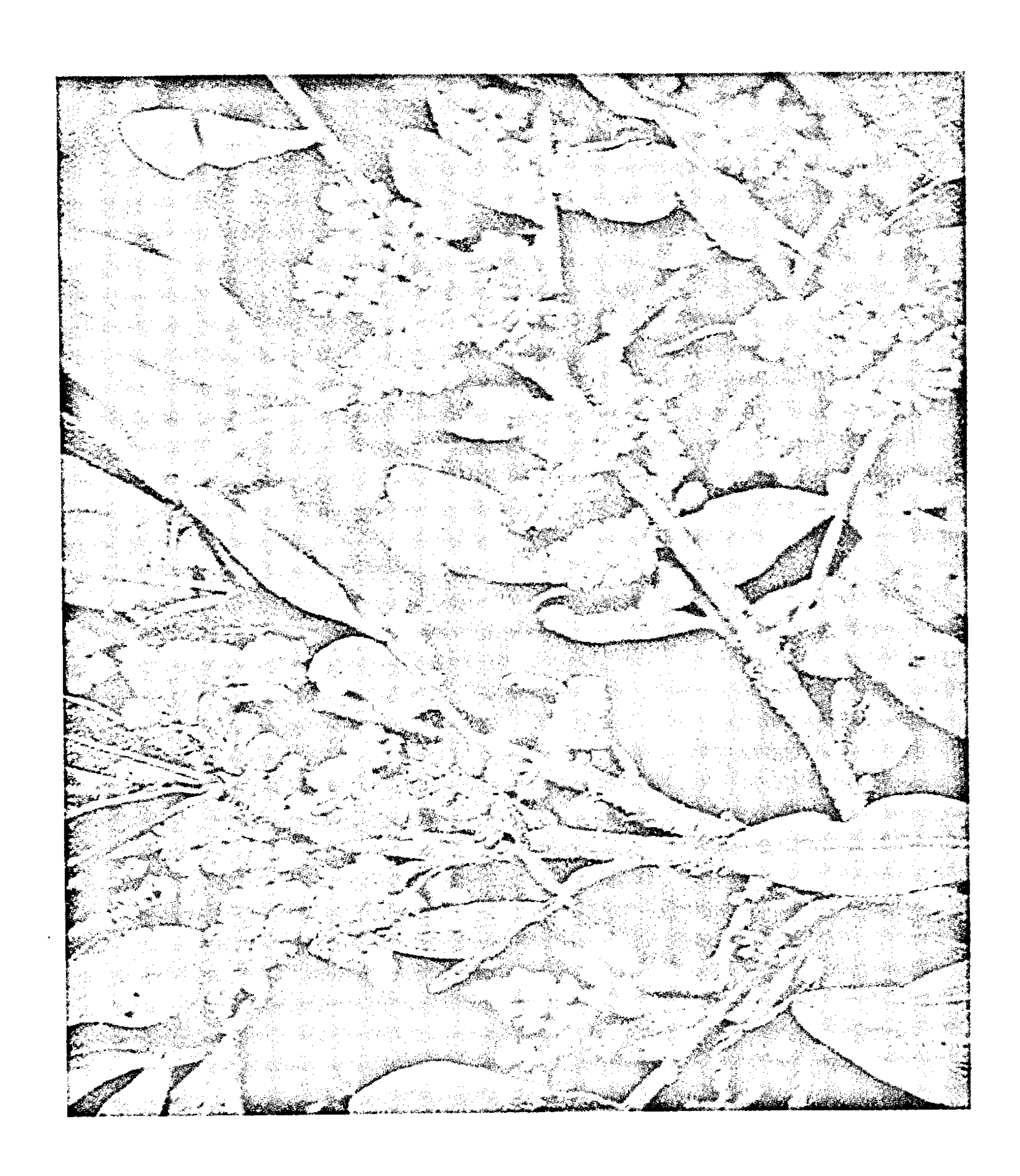
Part Used : Leaves , seeds , fruits and the resinous juice known as mastic obtained from the inner bark .

Principle constituents : Leaves contain tannin. Fruits contain volatile oil . Mastic contains resin containing alpha - resin (mastichic acid) , beta - resin (masticin) , volatile oil containing d - pinene which has balsamic odour .

Uses : Stimulant, diuretic, and astringent. Mastiche resin is employed by dentists for filling carious teeth. Gum mastiche is applied as a paste to the chest catarrh and pulmonary infections. Fruits are used as emulsion in cough mixtures and in the form of decoction as gargle for sore throat and beeding gums . They relieve toothache , harden the gum and stop bleeding .

Fruits are edible .

References : 1, 3, 12, 20, 21, 22, 25, 26.



(273) PISUM SATIVUM LINN.
LEGUMINOSAE

English Name : Field pea.

Local Name : بازليا ، بسلة ، جلبان
جلجلان

Description : An annual climber plant cultivated as vegetable crop. Leaflets 1 - 3 pairs ending in a tendril or point. Flower white or red.

Fruit pod containing the globular edible seeds known as peas.

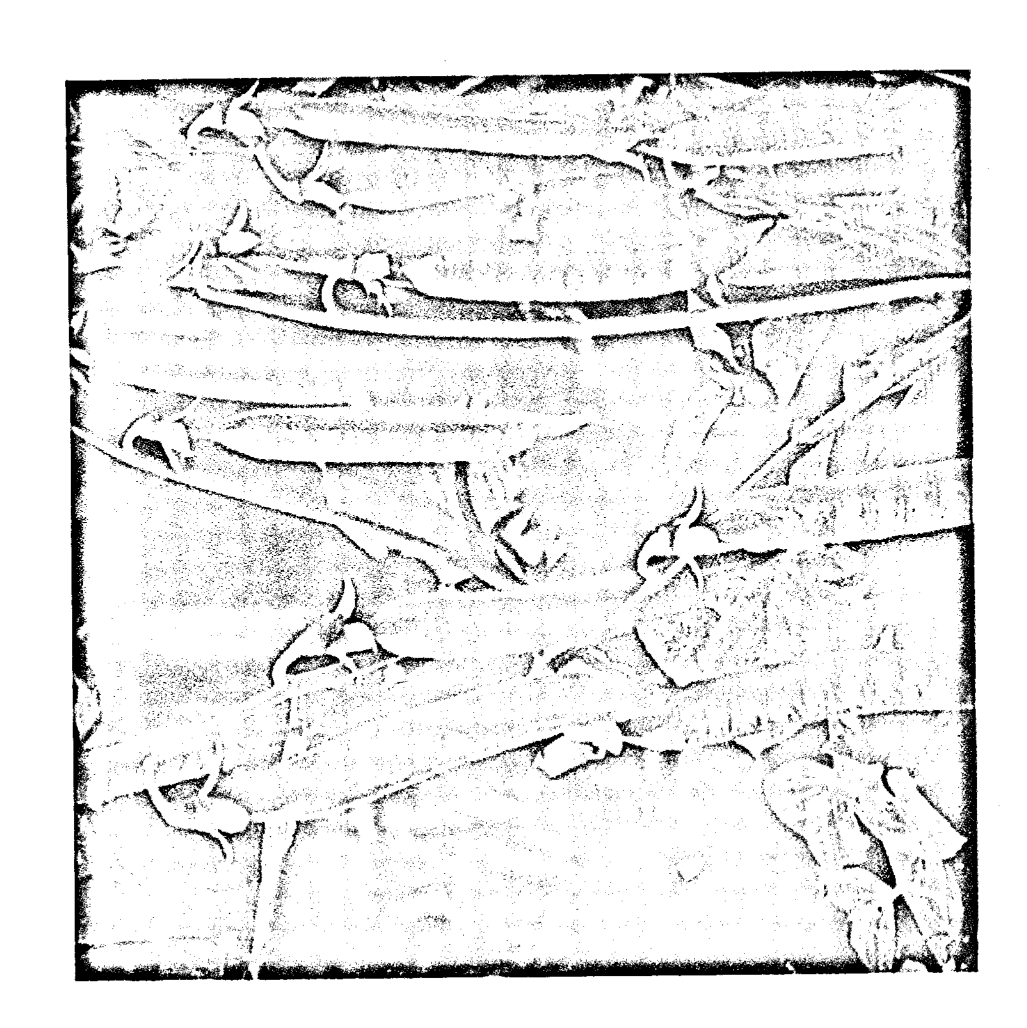
Part Used : Beans .

Principle constituents : Beans contain lectins, trigonelline, betaine, allantoin, choline and amino - nitriles.

Uses : It shows hypoglycemic activity. Lectins are specific on mono and oligosaccharides. In homeopathic medicine a tincture of the green grains is used in meningitis.Toxicityknown as lathyrism occur due to the presence of aminonitrile compounds. It appears as troubles to the nervous system, cramps, paralysis and difficulty in walking. Simple cases appear as diarrhea.

References : 1, 3, 12, 17, 21, 22, 24, 33, 40.





(274) PLANTAGO CILIATA DESF.

PLANTAGINACEAE

English Name : Fringed plantain.

Local Name : أنادام ، حلاوة البدن

Description: An annual stemless or with short stems. Leaves are obovate or lanceolate .

The plant occurs in Tripoli and Fezzan areas .

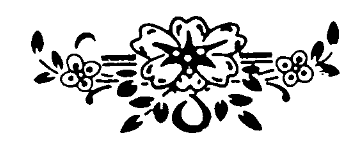
Part Used : Seeds

Principle constituents : Seeds contain mucilage, tannins and fixed oil .

Uses : The plant is used in the treatment of chronic constipation and dysentric disorders.

The mucilage coats the dudenum ulcer and promotes quick healing, it also absorbs toxins from the intestine.

References : 1, 2, 3, 12, 14, 21.



(275) PLANTAGO LANCEOLATA LINN.

PLANTAGINACEAE

English Name : Ribgrass, Plantain, Buckthorn, Ribwort - plantain.

Local Name : آذان الكبش ، ودن الجدي

Description : A perennial herb. Leaves are lanceolate pubescent comming out in a basal rosette from which comes out a flowering axis 15 - 60cm high. Flowers are very small in a dense, dark brown spike.

The plant occurs both in Tripoli and Benghazi areas.

Part Used : Leaves, roots and seeds.

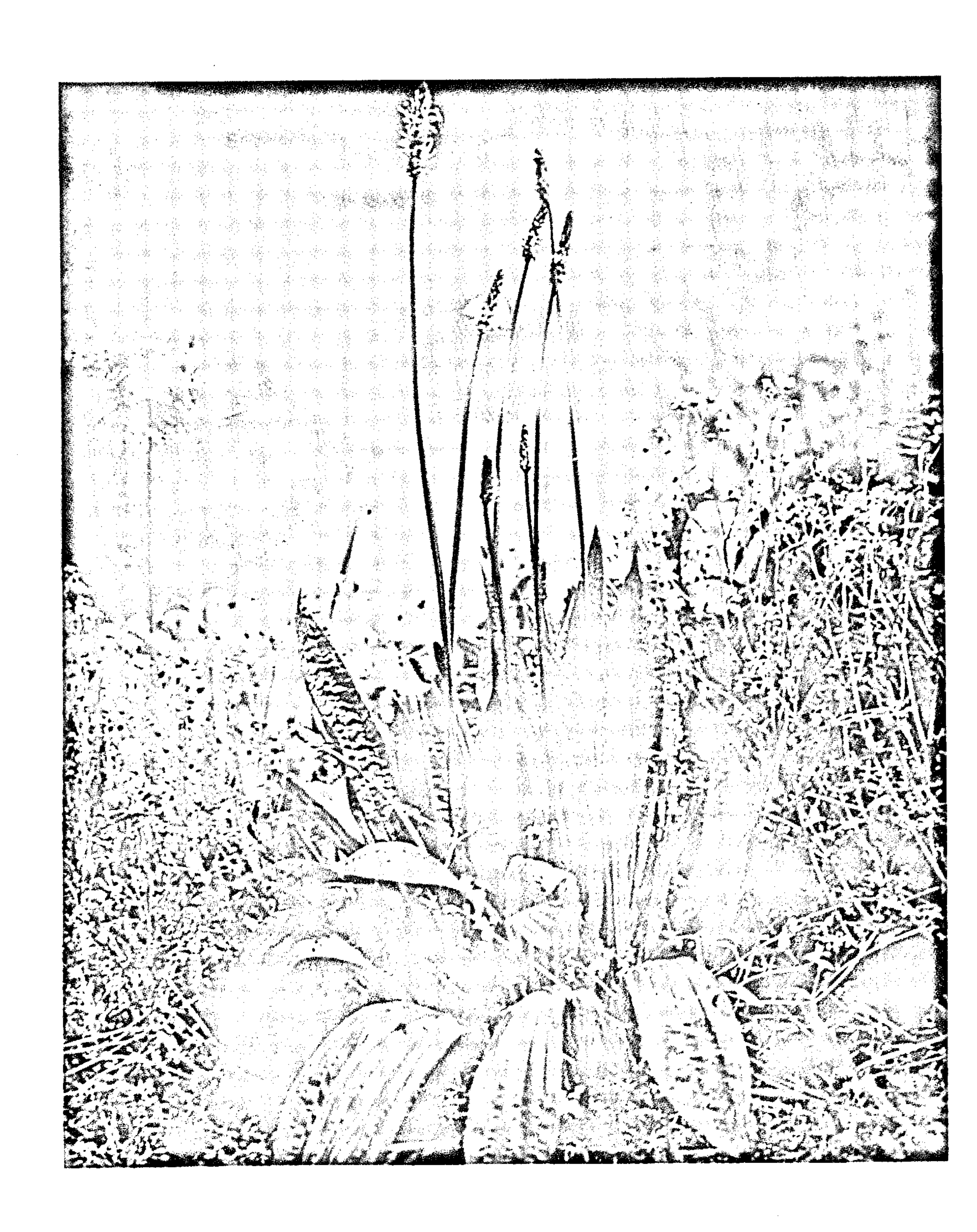
Principle constituents : The plant contains coloured glycoside aucubin, mucilage, tannin, the enzymes invertin and emulsin, bitter principle and vitamin C. Leaves contain nicotinic acid.

Seeds contain fixed oil

Uses: Diuretic, astringent, expectorant and prevents blood coagulation. It is used in the treatment of asthma, whooping cough, tooth and earache, tuberculosis and bladder irritation. Powdered plant in the animal diet supresses oestrus (insects infesting sheep - nose and produces temperary sterility. Leaves in the form of ointment is used to heal fresh wounds and as eye - drops indicated in conjunctiva and eye - lid inflammation.

Seeds mixed with sugar is used as drastic purgative and haemostatic.

References : 1, 2, 3, 10, 12, 14, 21, 38 39, 40.



(276) PLANTAGO MAGOR LINN.
PLANTAGINACEAE

English Name : Rat's tail plantain, Great plantain.

Local Name : لسان حمد ، لسان الحمل
مصاصه ، لينم

Description : A very large glabrous perennial 10 - 50 cm high. Leaves large, oval, petiolate arranged in a basal rosette. Flowers very small in a greenish spike 10 - 13 cm long.

The plant grows in Tripoli, Ajdabia and Benghazi areas.

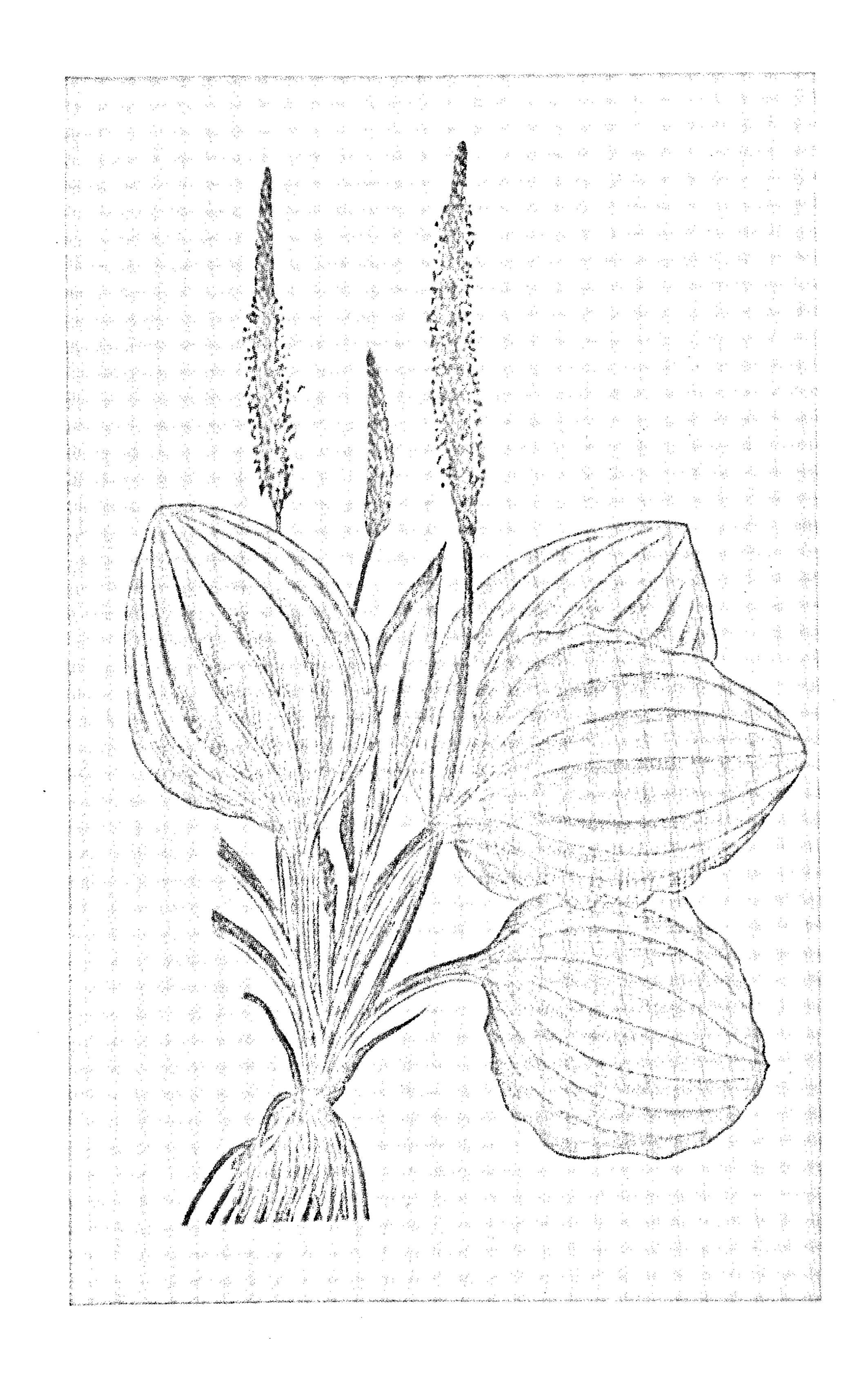
Principle constituents : The leaves contain citric acid, potassium salts, aucubin glucoside, the enzymes invertin and emulsin and triterpene oleandic acid (in the mature plant). Seeds contain aucubin, choline, organic acids, complex tri-saccharide planteose and non - drying oil.

Uses : The plant is used as an enema to clean bowels of the new borne infants, remedy for malaria, earache, dysentery and cough.

Externally it is used as astringent, poultice for insect bites and as massage at the base of spine for frigid female. Seeds are purgative, anthelmintic and supresses urine. Fresh leaf infusion is used as eye lotion

Fibrous strands from petiole is used for carious teeth and earache.

References : 1, 2, 3, 4, 10, 11, 12, 21, 22, 39, 40, 50, 57.



(277) PLANTAGO OVATA FORSK.
PLANTAGINACEAE

English Name : Ovate plantain, Spogel seeds, Ispaghula, Blonde psyllium.

Local Name : حلمه ، دقيس ، كباش ، ينم
لقمه النعجة

Description : An annual stemless plantain, villous - fleecy. Leaves narrow linear to lanceolate tapering to both ends.

The plant grows in Tarhuna and Tobruk.

Part Used : Seeds.

Principle constituents: The seeds contain fixed oil, albuminous matter, large amount of mucilage, tannin and a glycoside named aucubin. They also contain sugars and sterols.

Uses : The drug is used as cooling, demulcent, emollient, laxative especially in chronic constipation, and diuretic. Poultice made of seeds are applied to rheumatic swellings. A decoction is prescribed for cough and cold. The mucilage inhibits the growth of bacteria and absorbs toxins in the intestine .

Seeds are indigestable, they should be soaked in water several hours before ingestion. They should not be ground or masticated.

References : 1, 2, 3, 4, 11, 12, 14, 20, 21, 25, 26, 39.



(278) PLANTAGO PSYLLIUM LINN.
PLANTAGINACEAE

English Name : Clammy plantain, Psyllium, Flea seeds.

Local Name : حرموله ، بذر قاطونه
حشيشة البراغيث

Description : An annual acaulescent herb richly branced, sometimes glabrous, sometimes glandularhairy, with numerous heads on opposite peduncles. Flower small sessile in heads. Fruit capsule.

The plant grows in Tarhuna, Garian, Homs, Shahat and in Ghat.

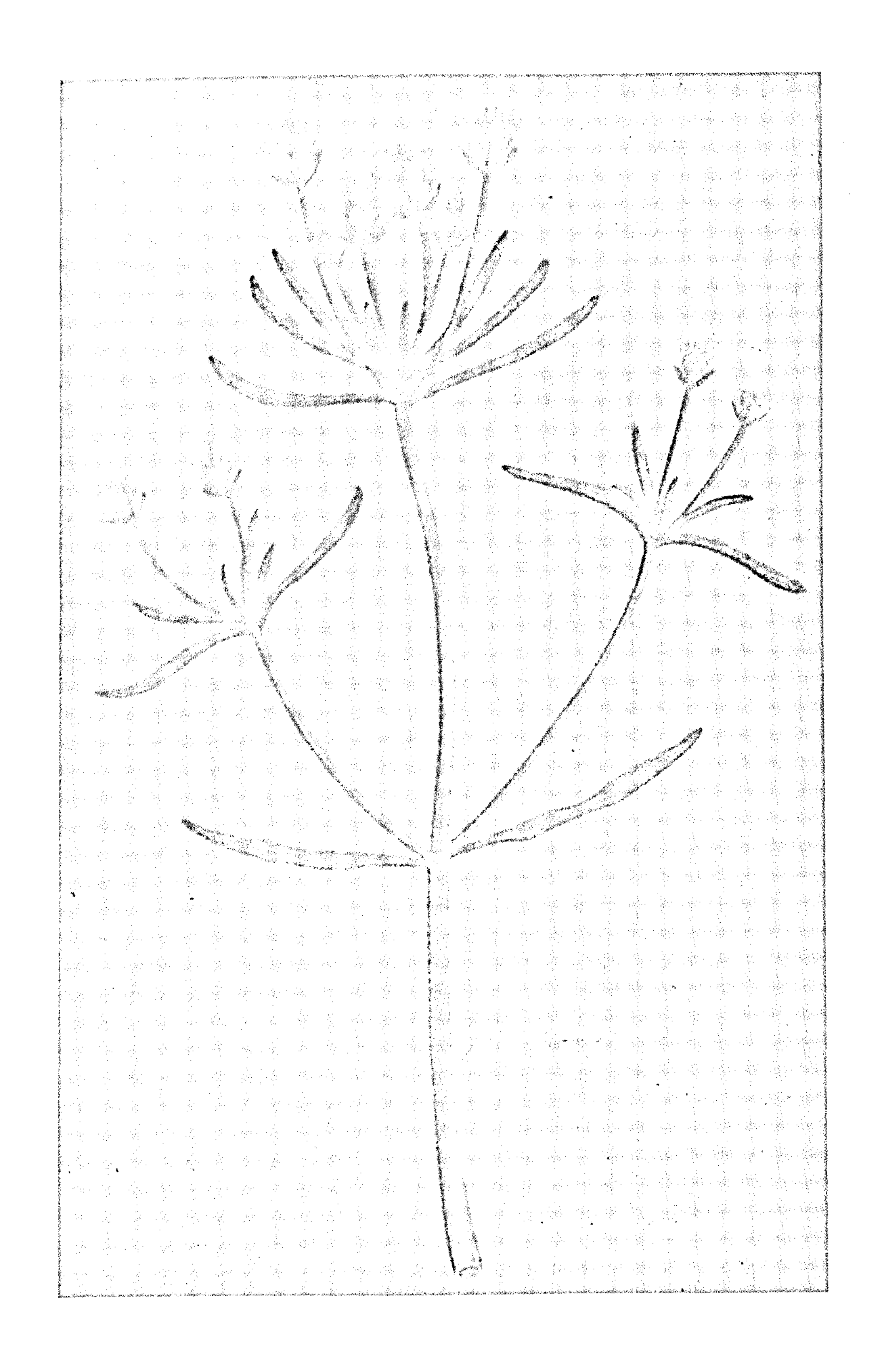
Part Used : Seeds.

Principle constituents : Seeds contain large amount of mucilage, the glycoside aucubin, enzymes invertin and emulsin, the organic acids, oxalic and mucic, fibers, protein and gums. Gums contain pentosans and galactans.

Uses : Mechanical laxative usually given with other purgatives such as Senna and Cacara . It is very good in chronic constipation .

The mucilage protects the mucous membrane of the intestine . It is considered as anti - inflammatory in cases of colitis and dysentery .

References : 1, 2, 3, 11, 12, 14, 21, 25, 26, 38.



(279) PLATANUS ORIENTALIS LINN.

PLATANACEAE

English Name : Oriental plane tree, Sycamore button wood.

Local Name : دلب ، شنار ، صنار

Description : An introduced cultivated deciduous tree with watery juice and scaling bark. Leaves alternate, palmately lobed. Flower monecious in separate and naked spherical heads. Fruit club - shaped, one seeded nutlets. Leaves alternate, large, long - stalked and woolly underneath.

Part Used : Leaves and bark.

Principle constituents : The plant contains allantion and asparagin.

Uses : The fresh bruised leaves are applied to the eyes in ophthalmia.

Bark, boiled in vinegar is given in diarrhea, dysentery, hernia and toothache.

References : 1, 3, 21.





(280) POLYGONUM AVICULARE LINN.

POLYGONACEAE

English Name : Door weed, knot grass, Wire grass.

Local Name : بطباط ، عصى الراعي

Description : An annual prostrate or erect plant 50 - 200 cm high with many narrow elliptic leaves. Flower solitary in upper ails with pink margins. Fruit brown.

The plant is common in waste areas, found in Benghazi and Tripoli areas .

Part Used : The flowering plant, roots and seeds.

Principle constituents: The plant contains polygonic acid, gallic acid , starch , calcium oxalate . Leaves contain mucilage , tannin , flavonoids , avicularin glycoside $C_{20} H_{18} O_{11}$ m.p. 216 - 17 C° , keampheral and quercitol . Roots contain anthraquinone derivatives , indigo - like dye . The plant is rich in silica .

Uses : Leaves are astringent, used in the treatment of diarrhea , and externally for ulcers and wounds . Roots are haemostatic , astringent and promotes healing of wounds . The plant is emetic , expectorant , diuretic , antihaemorrhagic and reduces the viscosity of blood .

The plant causes dermatitis, eczema, urticaria and skin irritation.

References : 1, 3, 14, 21, 40.



(281) POLYGONUM EQUISETIFORME SIBTH. AND SM.

POLYGONACEAE

English Name : Horse tail.

Local Name : قرضاب

Description : An annual or perennial herb with alternate leaves. Flowers pink or milky white funnelshaped in spikes or racemes.

The plant grows in many parts of the Jamahiriya as an important fodder.

Part Used : The whole plant.

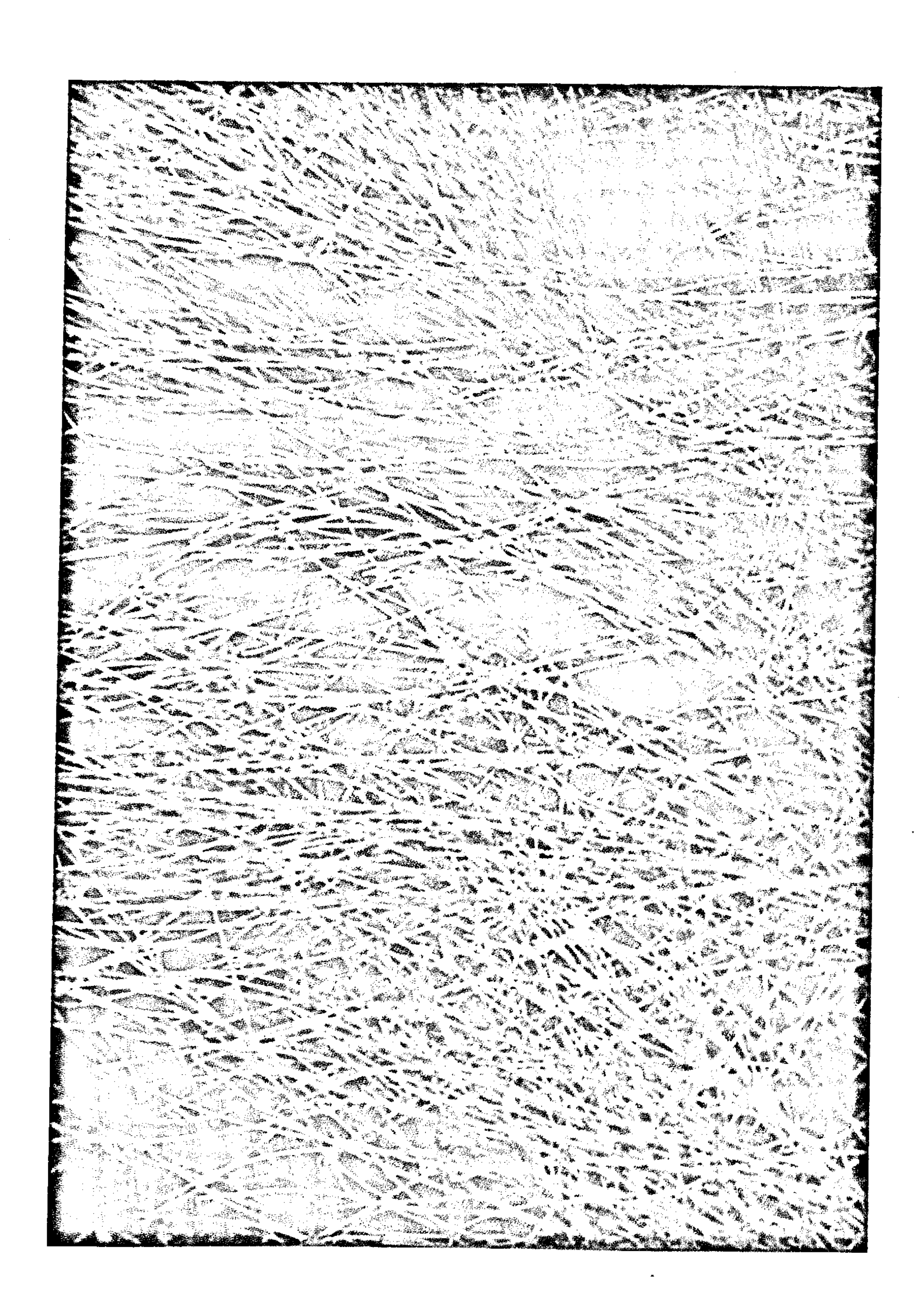
Principle constituents : The plant contains phenolic glycosides, saponins triterpenoids, flavonoids and an insulin - like substance.

Uses : The plant is used in the folklore medicine as antidiabetic.

It is considered one of the most imprtant fodder plant in Libya.

References : 1, 3, 34.





(282) POPULUS NIGRA LINN.
SALICACEAE

English Name : Lombardy - poplar, Black-poplar, Water-poplar, Willow - poplar.

Local Name : حور ، بقس ، حور أسود
حور رومي

Description : A small tree having branches horizontal or arched towards the ground. Leaves deciduous, fairly large alternate with long petioles.

Flowers small in a pendulous catkin.

The plant is common in Tripoli.

Part Used : The buds and bark.

Principle constituents : The buds contain the glucoside salicin which after ingestion is hydrolized to salicylic acid. It contains also the glycoside populin, chrysin, flavonoids, tannin and volatile oil containing humulene.

Uses: It is used as analgesic, intestinal antiseptic, antirheumatic , antipyretic , tonic , diuretic , diaphoretic and expectorant . It is used in cases of urinary tract infections , bronchitis , arthritis and rheumatism .

Liquor from the bark is depurative.

Externally it is used to treat haemorrhoids and wounds. It is also used in cosmetics and in making tooth - picks .

References : 1, 3, 21, 22, 38, 40.



(283) PORTULACA OLERACEA LINN.
var. sativa
PORTULACACEAE

English Name : Purslane.

Local Name : بلبشه ،رجله ، بربير ، بقله

Description : An annual succulent glabrous prostrate or ascending plant 15 - 30 cm high, branching from the base. Leaves spiral obovate - oblong. Flowers yellow. The plant grows as a weed in the fields.

Part Used : The entire herb.

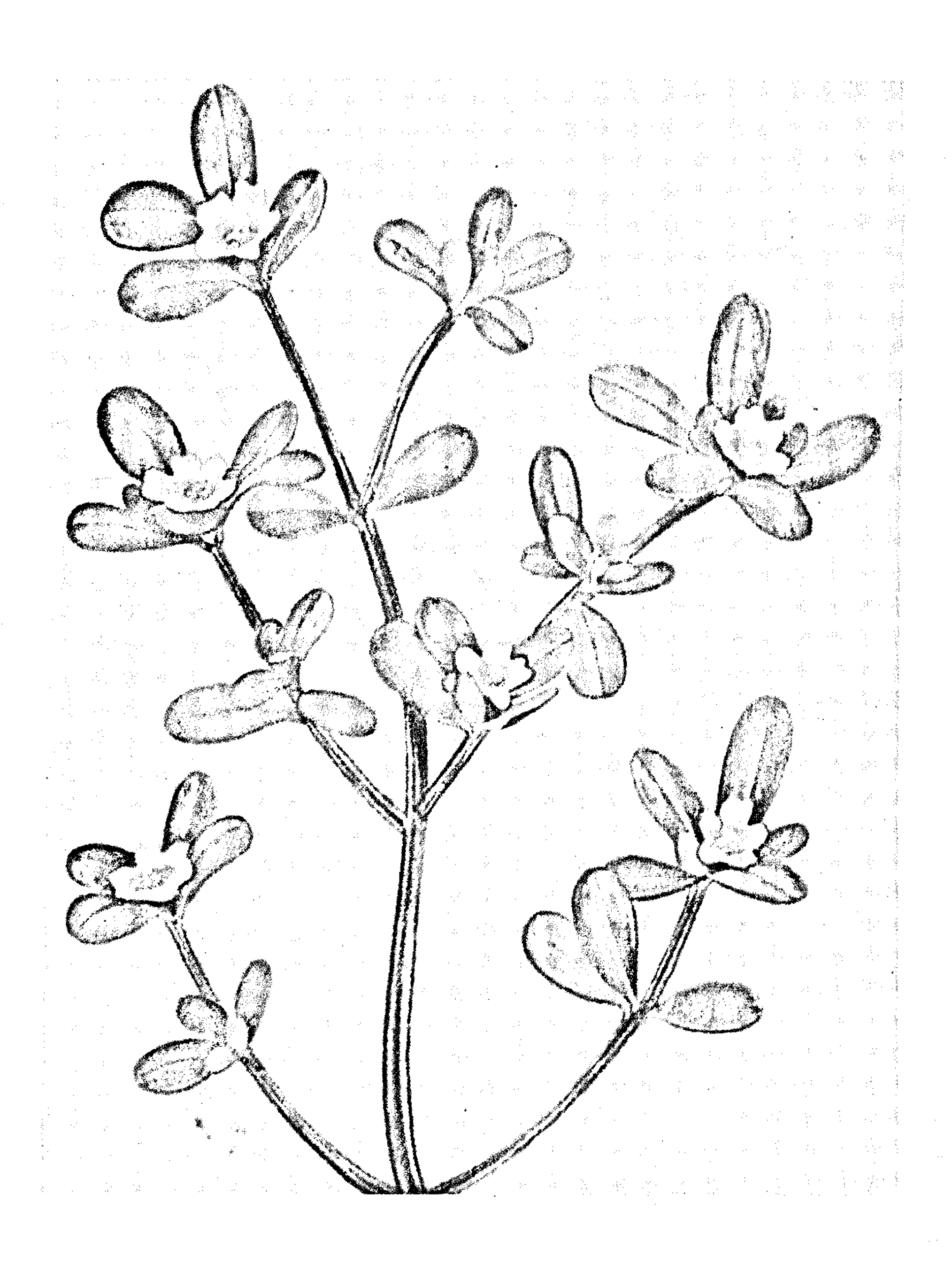
Principle constituents : The plant is rich in oxalates.It contains potassium , calcium and iron salts . Seeds contain fixed oil , volatile oil , alkaloids , glycosides and red pigments .

Uses : The herb is cooling, alterative, diuretic, antispasmodic, useful as an article of diet in scurvy and liver diseases. It has been used for sore nipples and mouth ulcers. Seeds are vermifuge.

Juice of the stem is applied to prickly heat and to the hands and feet in case of burning sensation. The plant produces acute oxalate poisoning in sheep.

References : 1, 3, 10, 14, 21, 22, 41.





(284) PULICARIA CRISPA FORSK.

COMPOSITAE

English Name : Crisp, Fleabane .

Local Name : عشبه المر

Description : Herb about 50 cm high with many appressed canescent stems and cob - webby canescent linear spathulate acutish toothed leaves half clasping on stem and branches. Flowers are yellow.

The plant grows in Tripoli, Benghazi and Fezzan areas .

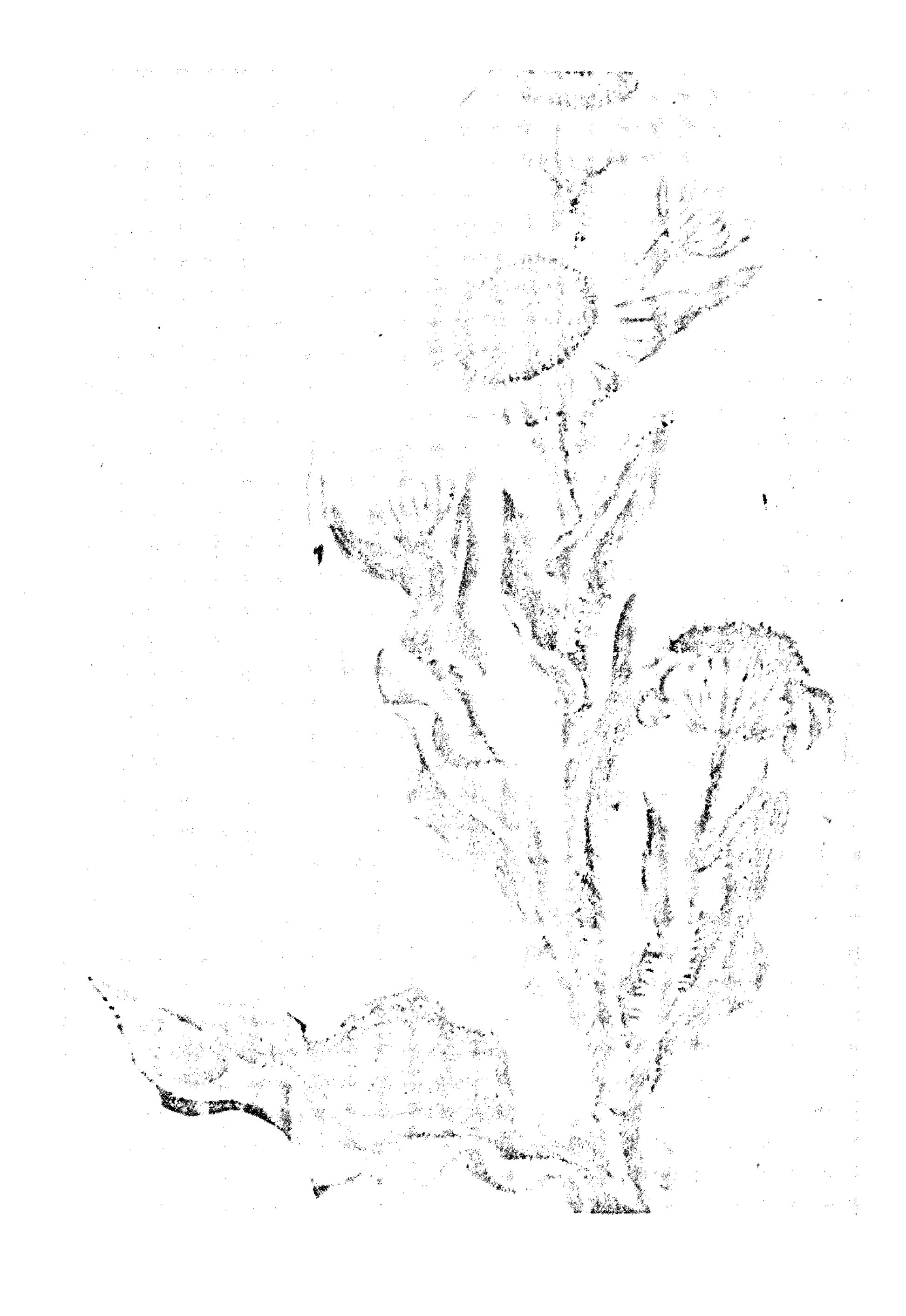
Part Used : The entire plant.

Principle constituents : The plant contains volatile oil.

Uses : The plant is aromatic. Bruised leaves are applied to the head to relieve headeche.

References : 1, 2, 3, 14, 21.





(285) PUNICA GRANATUM LINN.

PUNICACEAE



English Name : Pomegranate.

Local Name : رمان

Description : A small cultivated diciduous tree 3 - 4 m high. Leaves shiny green. Flowers large bright orange to red.

Fruit globose to subglobose 8 - 12 cm in diameter, with persistent tubular calyxand a leathery skin.Seeds are small numerous and soft.

Part Used : Dried fruit rinds, roots, seeds and bark.

Principle constituents : The rind is very rich in tannin. It contains the alkaloids pelletierine $C_8H_{15}ON$, pseudopelletierine $C_9H_{15}ON$ m. p. 53 - 4 C° , methylpelletierine and isopelletierine $C_8H_{15}ON$ and an oil b. p. 102 - 7 C° . Leaves contain invert sugar , glucose , citric , boric and ascorbic acids .

Uses : Decoction of the rind is used in dysentery, colitis and diarrhea . It is anthelmintic . Roots are used in case of urinary passages obstructions , and as oral contraseptive . Root bark is very astringent , taenifuge , emmenagogue . It is very good in tanning . Seeds are nutrient and antiscurvy .

References : 1, 3, 10, 12, 15, 21, 25, 26.